TASK-BASED INTERACTION: THE INTERACTIONAL AND SEQUENTIAL ORGANIZATION OF TASK-AS-WORKPLAN AND TASK-IN-PROCESS

CHRISTOPHER JOSEPH JENKS

Thesis submitted for the degree of

Doctor of Philosophy

Integrated PhD in Educational and Applied Linguistics

University of Newcastle-upon-Tyne

School of Education, Communication,

And Language Sciences

March 2006

ABSTRACT

This thesis investigates the interactional properties and sequential organization of tasks. The analysis is framed around the notion that tasks can be investigated from a task-as-workplan or task-in-process perspective. However, past and current interpretations of tasks have been taken primarily from a task-as-workplan perspective. The point of departure for this thesis is not only the emphasis put on task-in-process, but also the reconciliation of both perspectives. That is, this thesis examines whether a task does what it is claimed to do. The difference between what is planned, and what occurs, is at the heart of construct validity. This assumption will be investigated by analyzing the relationship between task-as-workplan and turn-taking and repair.

The findings demonstrate that although task-as-workplan can influence interaction, the decision to talk in a particular way or form occurs during task-in-process. Specifically, the participatory structure of tasks, which distributes referential information to task-takers, limits turn-taking and repair opportunities. For example, the ability to initiate and maintain the floor in tasks is largely dependent on the amount of information each task-taker is provided. Despite this influence, considerable task-in-process variation occurs.

It is later claimed that in order to provide a comprehensive picture of task-based interaction, both perspectives must be taken into consideration. This requires researchers to adopt a more holistic and detailed approach to the investigation of task-based interaction.

ACKNOWLEDGEMENTS

I would like to thank my supervisors, Paul Seedhouse and Vivian Cook, for all of their hard work and effort. They both have been an inspiration to me, and I will always remember our scholarly discussions. I will surely benefit from their expertise.

I would also like to send my gratitude to my thesis examiners, Li Wei and Keith Richards. The time and effort they put forth reading and commenting on my research is much appreciated.

All of my family and friends deserve special thanks. For without them, I would have not been able to enjoy life whilst conducting my doctorial studies. Special thanks must also go out to Universities UK, The University of Newcastle, and The School of Education, Communication, and Language Sciences, for it was them who provided me with generous scholarships and research grants.

Lastly, I must thank the research participants of this thesis. Collecting data is always a difficult endeavor. Their participation will never be forgotten.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

The purpose of this chapter is to establish the thesis' objectives. This will be accomplished by providing an overview of the literature and methodology set forth in this thesis. The second section of this chapter will attempt to highlight the importance and purpose of this thesis. This latter section concludes with two subsections. The first subsection will introduce the research questions, whereas the second subsection will provide an outline to this document.

1.1 Research Overview

Throughout the history of language teaching there have been many pendulum swings and bandwagon approaches (e.g., behaviorism and Audiolingual Method). Recently, there has been great discussion on the merits of adopting a more communicative approach than, say, Grammar Translation (Swan 2005). One way of fulfilling the demands of communicative approaches is to use tasks, also known as task-based learning and teaching (TBLT). Task, in a general sense, is any activity that allows students to focus on a non-linguistic objective, say a debate on moral issues (Ellis 2003). Accomplishing TBLT means using problem-solving type activities as the primary or supplementary source of communication, where students are responsible to discover the language in a more inductive way. There are obvious underlying assumptions that are being made with such an approach. One example is the notion that inductive methods to teaching and learning are better than deductive ones. This debate in regard to language teaching has been going on for decades (Swan 2005). However, it is not the purpose of this thesis to question the applicability of TBLT (see Pica 2005), but to examine the interaction that occurs as a result of implementing a task. This area of study is known as task-based interaction.

With this in mind, tasks have served two purposes in recent years. The first purpose of using a task is pedagogical. Here tasks are thought to be an effective way of encouraging students to use language. The second purpose of using a task is empirical. That is, tasks are used to elicit second language data in order to answer predefined research questions. It should be noted that tasks, as understood within both purposes, are used to encourage language production. However, this thesis is concerned with only the empirical purpose, though some pedagogical implications will be made.

In particular, this thesis is interested in the type of task-based interaction that occurs as a result of a dyadic setup (i.e., two participants completing a task). In recent years dyadic task-based interaction has been the focal point of many second language acquisition (SLA) studies (see Chapter 2). This phenomenon can be attributed to many influential SLA researchers (e.g., Hatch 1978), but perhaps the most influential in regard to dyadic interaction, is Long (1981). Specifically, task-based interaction has received much attention in pedagogy and research because of Long's (1996) updated Interaction Hypothesis (see Section 2.4). This hypothesis claims that if language users experience communicative trouble that requires fixing (e.g., mispronunciation that changes the meaning of a word), language development will likely follow. Below is an example taken from Bitchener (2004, p. 82). In this example, Bitchener claims S2 does not know the word amputation, and consequently seeks clarification. Again, it is thought that this type of negotiation is beneficial to language development.

Example Extract 1: Trouble in communication
1 S1: I blame the doctor, he ampatated the wrong leg.
2 S2: What means ampatated?
3 S1: The doctor cut off the leg.
4 S2: So he ampa . . . amp . . . amp-u-tated the leg, yeah?
5 S1: correct.

Because tasks can be modified in a way that encourages breakdowns (or challenges) in communication (e.g., comparing two different pictures), they have been central in investigating the developmental benefits of the negotiation for meaning (NfM; see Pica 1994). This can include anything from problems in communicating and understanding the *meaning* of an utterance (e.g., referring to a desk as a table), to specific problems in the *form* of a language (e.g., missing pronouns). NfM is also known as 'input negotiation', 'correction', or 'repair'. In Chapters 3 and 5 it will be demonstrated why repair is a more appropriate term for this thesis (see the next section for a brief definition of repair). SLA studies that have attempted to confirm or refute this area of study have

traditionally used dyadic task-based interaction data (see Section 2.5.3), such as the one introduced in the previous extract.

Although the literature included in subsequent chapters is by and large research that has developed as a result of Long's (1996) Interaction Hypothesis (see Section 2.4.1), this thesis is not centrally concerned with scrutinizing this line of research. That is, what will not be investigated in this thesis is the correlation between NfM and language development. In other words, this thesis is a study of language use, and not language acquisition (N.B. Gass and Selinker 2001 also make this distinction, whereas Markee and Kasper 2004 would say that the two are interrelated).

Investigating task-based language use will be done by distinguishing between two perspectives taken in task-based interaction. Specifically, there is the language use that is conceptualized as task designers conceive it, and the language use that is borne out as a result of completing a task. The former situation is commonly referred to as task-as-workplan, and the latter as task-in-process (see Breen 1987, pp. 23-25; Section 2.2.1).

There are two fundamental differences that must be identified. First, task-as-workplan is a conceptualization, though the word prediction may also be appropriate; it is a plan of how the task *should* be completed, and what type of language *should* occur. Task-in-process is language production; it is the *actual* occurrence of talk. This distinction, though commonsensical, will be shown to be overlooked in many task-based interaction studies (see Seedhouse 2005 for extracts showing this distinction).

Second, what is planned during task-as-workplan does not always correspond with what actual occurs during task-in-process (Breen 1987). For example, a task may be designed to promote the NfM (task-as-workplan perspective), but through reinterpretation and understanding, task-takers may deviate from this workplan objective (task-in-process perspective). For an example see the extract below. Understanding why deviations occur

between these two perspectives is at the heart of this thesis. In order to understand how these two perspectives interact, the analysis in Chapter 5 will investigate if there are any characteristics within task-as-workplan that would compel task-in-process to follow any systematic patterns. Conversely, this thesis will also examine why task-in-process deviates from its intended task-as-workplan objectives.

Although the distinction between these two perspectives is a generally accepted fact in TBLT (Ellis 2003), many task-based interaction assumptions and findings are taken strictly from a task-as-workplan perspective. For example, there is a general assumption in TBLT that tasks are an excellent medium for communication (Nunan 2005); however, as Seedhouse (1999a) demonstrates, task-based interaction can also be impoverished because students may be more concerned with completing the task than participating in extended discourse. The following extract provides a clear example. Here the task-takers are attempting to complete a geometric-oriented task.

Example Extract 2: Impoverished task-based interaction

1 L1: what?
2 L2: stop.
3 L3: dot?
4 L4: dot?
5 L5: point?
6 L6: dot?
7 LL: point point, yeah.
8 L1: point?
9 L5: small point.
10 L3: dot.

(T. Lynch, 1989, p. 124; cited in Seedhouse 2004; p. 126)

In regard to completing the task, the actual *process* of this interaction is rather efficient and effective. To say that the interaction is the type that is thought to promote language development is another matter. Furthermore, in this extract both task-takers employ a total of six NfM moves (what?…dot?…dot?…point?…dot?…point?). An abundance of NfMs, therefore, does not necessarily represent an essential component of task-based

interaction. However, according to the Interaction Hypothesis, the actual *product* of quantifying NfMs would appear to indicate language development. There is an obvious, inherent methodological tension within this process versus product analysis, and this thesis will attempt to highlight it vis-à-vis task-as-workplan and task-in-process (N.B. qualitative methodologies are traditionally used to investigate the process of interaction).

In addition, the product-oriented approach is largely dictated by the fact that many task-based studies adopt a more quantitative, positivistic methodology (see Ellis 2003; Littlewood 2004; Slimani-Rolls 2005; Seedhouse 2005). The objective here is to identify task-as-workplan characteristics that may help validate some central objective, such as NfM and language development. There are in fact several task-as-workplan characteristics that are thought to have predictable patterns of influence. For instance, the way referential information is distributed in tasks is thought to be a fairly predictable indicator of how much NfMs will occur (N.B. this characteristic is commonly referred to information gaps; see Section 2.4 and Chapter 4). Because these studies assume that there is a static relationship between task-as-workplan and task-in-process, quantifying isolated episodes of talk (e.g., NfM) is thought to be an acceptable mode of analysis.

While in general there are no significant problems in quantifying interactional episodes, a great deal of richness is lost (Slimani-Rolls 2005). As a result, the *process* of task-in-process comes second to numerical sums. This lack of task-in-process detail is the primary reason why this thesis adopts a more qualitative approach to task-based interaction data. However, it should be noted that identifying the implications of a process versus product methodology is not only a matter of researcher preference. The fundamental difference in selecting a process or product approach, as they are related to task-based interaction, is the level of detail that task-as-workplan and task-in-process gets. As previously mentioned, this thesis possesses an empirical purpose. This

empirical purpose is to investigate whether tasks, as largely conceptualized within a quantitative, positivistic paradigm, correlate with task-in-process. As one of its objectives, this thesis will determine if tasks encourage task-takers to NfM.

Whether a task does what it is claimed to do is also an issue of construct validity. Because construct validity is concerned with the relationship between what is assumed to be measured, and what is actually measured, the task-as-workplan and task-in-process perspectives are particularly conducive for this type of analysis. For example, this thesis will investigate whether opportunities to NfM are in fact a result of some task-as-workplan characteristic. Therefore, construct validity, as it is discussed in this thesis, relates to opportunities to NfM (i.e., repair).

Though construct validity is traditionally associated with quantification, it is the precise details that are gleaned from a qualitative methodology that will help dispel any ambiguities that exist between what is assumed, and what occurs. To put it in another way, construct validity in regard to task-based interaction is the reconciliation between what is planned (task-as-workplan), and what occurs (task-in-process). Seedhouse (2005, p. 534) summarizes this idea when he stresses,

> "In practical terms, this means that the research construct "task" has to have a tangible objective reality of its own and be concretely specifiable. This is vital because in a quantitative paradigm, researchers must be certain that what they are actually measuring/researching is exactly the same thing as what they claim to be measuring/researching; this is the basis of its conception of validity."

In other words, how do we know whether a task does what it is claimed to do? The claim that will be investigated in the data analysis chapter will be notion that tasks can encourage task-takers to repair. It is believed that the conversation analytic methodology adopted in this thesis will allow for a more in-depth examination into the perspectives that exist in task-based interaction (see Chapter 3). The issue of methodology provides a gateway to the thesis aims. This will be discussed in the following section.

1.2 Research Purpose

The purpose of this thesis is to illustrate the importance of reconciling task perspectives. Although the perspective taken to analyze task-based interaction data represents unique research objectives and traditions (e.g., conversation analytic studies are predominantly concerned with task-in-process), a comprehensive account of how tasks affect task-takers must include both perspectives involved in task-based interaction.

For example, task-based interaction is variable and dynamic (see Chapter 5). Restricting analysis to a task-as-workplan (e.g., quantification) may overlook such interactional qualities. Conversely, restricting analysis to task-in-process (e.g., the sequential organization of task-talk) will fall short in accounting for any task-as-workplan variables that may influence the interaction (see Section 5.1). Therefore, it is believed that moving the tradition of analyzing task-based interaction from a task-as-workplan perspective (see Chapter 2) to a more task-in-process perspective (Seedhouse 2005) is not sufficient. What is also needed is an account of how the two variables influence each other.

This thesis will adopt a conversation analytic methodology to analyze the interactional properties and sequential organization of task-as-workplan and task-in-process. Furthermore, an ethnomethodological understanding of reflexivity and indexicality will be used to examine the means in which task-takers come to understand tasks. By looking at the interplay between task-as-workplan and task-in-process, this thesis will demonstrate how the former variable provides an interactional framework in which task-takers are to work, but it is ultimately the latter variable that encompasses the variable and dynamic qualities of task-based interaction. Again, this relationship is at the heart of construct validity. More importantly, construct validity as it relates to tasks and their

influence on the NfM. The next section will establish the research questions that will help understand this relationship.

1.2.1 Research questions

The following research questions were developed to highlight the importance of reconciling task perspectives. The first research question aims to examine the interactional properties and sequential organization of task-as-workplan and task-in-process. The last two research questions aim to examine the construct validity, as it is related to opportunities to repair (N.B. repair is an interactional device used to overcome some communicative difficulty, such as slips of the tongue or ungrammatical talk). Again, all three questions stress the importance of reconciling task perspectives.

1. What interactional influence does a task-as-workplan have on a task-in-process?
2. Do tasks encourage task-takers to repair?
3. What repair resources do task-takers use in task-based interaction?

1.2.2 Thesis outline

This chapter has provided an overview and purpose of this thesis, while highlighting the importance of construct validity and task perspectives to task-based interaction research. The literature to these concepts will be discussed in detail in Chapter 2. This literature review chapter is divided into seven main sections, each introducing information crucial to the analysis of data. Chapter 3 describes the epistemological and methodological principles of conversation analysis (CA) and ethnomethodology. Distinctions will be made in regard to etic and emic interpretations to data analysis. This chapter will end with justifications as to why the adopted methodology is suitable for this thesis. Chapter 4 provides an overview of the methods used to collect data. This chapter will include brief discussions on the tasks and participants used in this thesis. Chapter 5

is the data analysis section, whereas Chapter 6 summarizes data and establishes implications. Final conclusions will be made in Chapter 7.

CHAPTER 2: LITERATURE REVIEW

This chapter will attempt to present the argument that the construct validity of tasks is an important issue in task-based interaction studies. This will be done be examining construct validity vis-à-vis NfM (repair). The construct validity of tasks is simply a matter of knowing whether a task does what it is claimed to do. Demonstrating the significance of construct validity will be done by showing how two perspectives exist in task-based interaction. Breen's (1987) notion of task-as-workplan and task-in-process will be applied to these perspectives. It will be argued that reconciling these two perspectives is a construct validity issue.

As just mentioned, the example that will be used to discuss construct validity is the notion that tasks produce or encourage a particular form of talk. More specifically, some tasks are believed to encourage task-takers to NfM. The psycholinguistic approach to task-based interaction, and its Input-Interaction offshoot, will be shown to be a significant contributor to this type of belief. This discussion will provide a foundation for the conversation analytic methodologies employed in this thesis. The literature review is divided into six main sections (Sections 2.1 – 2.6).

Section 2.1 briefly discusses task-based interaction research. This section begins with a short discussion on the growth of task-based interaction research, and why the growth and popularity has sustained. Two dependently related issues in task-based interaction research are then identified as central to the investigation of this thesis. These issues are the construct validity of tasks, and the NfM in task-based interaction.

Section 2.2 begins by providing task definitions. Sections 2.2.1 and 2.2.2 will introduce the notion of task perspectives. Through these discussions, the concept of construct validity will be discussed. It will be argued that the construct validity can be maintained by accounting for both task perspectives.

Section 2.3 introduces three common frameworks used to study tasks, and some general assumptions they make in task-based interaction research. These frameworks are the psycholinguistic, cognitive, and sociocultural approaches to TBLT. Their theoretical and analytical similarities and differences will be highlighted.

Section 2.4 discusses in detail, the psycholinguistic approach to task-based interaction. This review will focus on the matter of whether tasks can encourage task-takers to NfM. It will be illustrated in this section that the Input-Interaction framework is the dominant approach to this type of understanding. The claims put forth by Input-Interaction researchers, and the criticisms made against such claims, are the centerpiece of discussion (Sections 2.4.1 – 2.4.2).

Section 2.5 will review what is meant by NfM. An understanding of 'negotiation' and 'meaning' will be discussed in relation to a psycholinguistic understanding of tasks (Sections 2.5.1 – 2.5.2). Section 2.5.3 will then review the literature on the task characteristics that are claimed to promote the NfM. The criticisms of these studies conclude this section.

Section 2.6 then reviews the contributions conversation analytic studies have made in task-based interaction and second and foreign language acquisition studies. This section will conclude with a look into what a conversation analytic account, the main research methodology used in this thesis, can offer task-based research and second and foreign language acquisition studies.

2.1 Task-Based Interaction Research

As communicative approaches to language teaching and research become a more fashionable area of investigation (Skehan 2003), tasks are being increasingly used to investigate second and foreign language acquisition and use (e.g., Oxford, Cho, Leung, & Kim 2004; Ohta & Nakaone 2004; Mori 2004; Kiernan & Aizawa 2004). Since the early 1980s, task-based research has been claimed to be "...a central element of language pedagogy" (Bygate, Skehan, and Swain 2001a, p. 1). Ellis (2003, p. 1) has even claimed that "Tasks...hold a central place in current SLA research and also in language pedagogy." The relationship between task-based research and pedagogy has had a significant impact on the popularity of tasks (Bygate *et al.*'s 2001b). The state-of-the-art book length publications on TBLT clearly illustrate a discipline growing in significance (e.g., Ellis 2003; Bygate *et al.* 2001b; Nunan 2005). The growth and popularity of task-based research and pedagogy has been largely influenced by the idea that tasks are an effective way to elicit linguistic data, and sequence instructional activities (Ellis 2000). As Chapter 1 has highlighted, tasks have served two purposes in recent years, one being empirical and the other being pedagogical (N.B. it is the former domain that will be the focus of this thesis).

This evolution can be attributed largely to Hatch's (1978) call for SLA researchers to examine how the learning of language develops out of communication (cf. communication develops out of language learning), though Long's (1980) doctoral work proved to be a significant catalyst to the many NfM studies that followed (Pica 2005). Both Hatch and Long emphasized the importance of the linguistic environment (N.B. examples and discussion of this type of work are discussed below, and in Sections 2.4 and 2.5), basing much of their conclusions from similar first language studies (see Gallaway & Richards 1994). Much of the initial research spawned from this particular focus came

from studies concerned with NfM. This interest was based on the idea that input modification provides non-native speakers (NNSs) of English with comprehensibility and subsequent language acquisition (Larsen-Freeman & Long 1991). Initially these studies investigated the input modifications produced by native-speakers (NSs) of English conversing with NNSs (also known as foreign talk; e.g., Long 1981). Later more attention was paid to how the type of task used in these studies influenced the interaction. This is when the study of task-based interaction became a seminal issue in SLA (Pica, Kanagy, & Falodun 1993). This line of research later evolved into the study of tasks, and the ability of tasks to encourage task-takers to modify their speech (e.g., Bygate 2001). The following extracts provide prototypical NfM examples. The examples demonstrate the range in which NfMs can occur in task-based interaction. In Example Extract 3, the task-takers are negotiating the form of their description (i.e., the verb), whereas in Example Extract 4, the task-takers are negotiating the adequacy of their description (i.e., door versus gate). Both examples are typically used to demonstrate language development.

Example Extract 3: NfM episode in task-based interaction

1 S: also they must leave … in the place in the place where they have to leave a tip
2 P: tip tip
3 SJ: give a tip
4 P: yes
5 SJ: leave
6 P: leave
7 S: leave or give?
8 P: I don't leave
9 S: OK, er leave a tip
10 SJ: and then about about
11 S: yes yes yes because it's about leaving a tip…they must know the places where they
12 have to leave a tip …

(Fortune & Thorpe 2001, p. 148)

Example Extract 4: NfM episode in task-based interaction

1 S1: Platform two door is closed.
2 S2: You mean the gate is closed?
3 S1: Gates? Yeah, the gates are closed. Yeah, yeah, the gate is like door.

4 S2: Yeah, closed. The gate is closed. You too?

(Bitchener 2004, pp. 81-82)

The upshot of this pendulum swing is the area of SLA that subscribes to the Input-Interaction framework. This framework stresses the developmental importance of a series of linguistic variables, such as input, input modification, output, and noticing. Task-based interaction studies informed by this framework were motivated by the fact that the type of talk produced in tasks appeared to be in sequence with the theoretically driven hypotheses of the Input-Interaction type (e.g., more metalinguistic opportunities increase the likelihood of language development). Much of these initial (and contemporary) studies were "...cross-sectional and quantitative in approach, yielding descriptions and taxonomies" (Wesche 1994, p. 219). Researchers working under this approach were centrally concerned with validating tasks by quantifying isolated episodes of talk (such as the ones in the previous extracts). The more episodes of NfM found in a task the better it was thought to suit the developmental needs of language learners. This product-oriented approach is part and parcel of Input-Interaction task-based studies (Block 2003). The consequence of such an approach is that much of the *process* of achieving such talk is neglected (Long 1996; Ellis 2003).

The habit of analyzing task-based interaction data from a product-oriented approach also led to a psycholinguistic typology of tasks (see Table 2.1). This typology represents assumed systematic correlations between task-as-workplan (e.g., task outcome) and task-in-progress (e.g., episodes of NfM). A great deal of influence came out of the fact that this typology neatly and simply illustrated such correlations. For example, much of the ways in which task-based research and syllabi were planned came from the idea that tasks can be manipulated in a way to encourage a specific set of outcomes (Ellis 2000; Skehan 2003). The notion that more NfMs will occur if specific task dimensions are selected is a

classic example. The following table provides some examples of these assumed correlations. The first task dimension, information exchange, deals with the type of information task-takers are required to discuss. Information gaps require task-takers to exchange specific information, whereas opinion gaps require task-takers to provide opinions to a given set of information (see Section 4.3 for specific examples). This table shows that the former is better for NfMs. The second task dimension, information gaps, refer to how referential information is distributed in dyadic tasks; in a two-way information gap, both task-takers have information essential to the task's completion, whereas in a one-way information gap, only one task-taker possesses the information. Furthermore, in a two-way information gap, both task-takers share the same information, while in a one-way information gap, the task-taker who possesses the information must share it with the other, usually in the form of giving instructions or describing a picture (see Ur 1981). This table shows that two-way information gaps are more conducive to NfMs (N.B. see Section 2.5.3 and Chapter 6 for conflicting data). Task dimensions, such as outcomes and task familiarity, are neither investigated nor shown to be a factor in this thesis (see Section 2.1.1 for examples of task types).

Table 2.1 - Task dimensions hypothesized to promote NfM

Task Dimensions	**More positive**	**Less Positive**
Information Exchange	Required (Information Gap)	Optional (Opinion Gap)
Information Gap	Two-way	One-way
Outcome	Closed	Open
Task Familiarity	Non-familiar	Familiar

Modified from Ellis (2000, p. 200)

The table demonstrates the propensity to understand task-based interaction as if there were one-to-one correlations between task-as-workplan and task-in-process. This assumption has left a large process-oriented gap to fill (Ellis 2003), such as the question of how dimensions interact with each other (N.B. Ellis 2000 identifies more task dimensions than those shown in Table 2.1; the purpose of the table above is to simply illustrate some of the more common task dimensions that have been studied). More crucial to this thesis, the task dimensions identified in the table above have been accounted for by isolating and quantifying episodes of NfM. As this thesis will show, there are other variables that come into play whilst considering the influence task-as-workplan has on task-in-process (e.g., constraints on who is initiating and completing NfMs).

To summarize, the study of task-based interaction, though popular and growing in significance (Long 1981; Littlewood 2004), raises many pedagogical and empirical issues. Because a large portion of the task-based interaction literature is product-oriented (Ellis 2003), more research is needed on the dynamic, process-oriented interplay between task-as-workplan and task-in-process. The subsequent sections will discuss this relationship in regard to task perspectives and NfM, but before doing so, a short discussion of the types of tasks that are commonly used in the literature will be introduced.

It is important to end this section by stating that because the study of NfMs has been carried out primarily under the Input-Interaction framework (Block 2003), a considerable portion of this chapter will include studies that represent or question Input-Interaction research; however, the claims put forth by Input-Interaction researchers do not represent the ideas of the current investigation, but will provide a backdrop for the conversation analytic methodology used in this thesis.

2.1.1 Task types

Before introducing the main concepts of this chapter, this section will outline some of the tasks that are commonly used in TBLT. This will offer a foundation to the discussion of tasks used in this thesis (see Section 4.3), and the literature introduced in the following sections.

As mentioned before, tasks are commonly used to elicit data. There have been several types of tasks used to achieve this objective. The most common forms of tasks are information gaps (e.g., Long 1980), Jig-Saws (e.g., Swain & Lapkin 2001), opinion gaps (e.g., Pica, Holliday, Lewis, Berducci, & Newman 1991), problem-solving (e.g., Duff 1986), and decision-making (e.g., Pica and Doughty 1985).

In a Jig-Saw task, task-takers are given different information all essential to the completion of a task; task-takers are then required to cooperatively assemble the information to complete an objective, such as constructing a story. Decision-making and problem-solving tasks both require task-takers to exchange given information. In these types of tasks, a number of different outcomes or solutions are possible. Opinion gap tasks also offer multiple task outcomes or solutions, but in this case, task-takers are offering their opinions to topics or pictures (N.B. information and opinion gaps have already been discussed in the previous section; see Table 2.1).

In this thesis, only information and opinion gap tasks are used (see Pica *et al.* 1993 for a detailed discussion on all of the tasks discussed above), though it is important to note that these task type distinctions may be misleading (see Chapters 5 and 6). Appendix B provides examples of the information and opinion gap tasks that have been used in the *collection* and *analysis* of data (N.B. Section 2.5.3 discusses these tasks in relation to the NfM). On a final note, information and opinion gap tasks are the focal point of analysis because NfM studies rely heavily on their application. Yet, investigating these tasks with

a more contextual, qualitative analysis, such as the one adopted in this thesis, will reveal important interactional features that were hitherto overlooked or de-emphasized. Now that task types have been introduced, the next section will discuss two key task-based interaction concepts.

2.2 Task Definition: Task Perspectives and Construct Validity

Before introducing the task-based interaction literature, it is important to establish a definition of task, as it is related to the literature and this thesis. It was briefly mentioned in Chapter 1 that most understandings and findings of tasks come from a task-as-workplan perspective. Definitions of tasks are no exception. Take the following quote for example. Here Ellis (2000, p. 195) defines tasks as they are related to task-as-workplan and task-in-process. He later goes on to state that most definitions of task come from a task-as-workplan perspective.

"A task is a 'workplan'; that is, it takes the form of materials for researching or teaching language. A workplan typically involves the following: (1) some input (i.e. information that learners are required to process and use); and (2) some instructions relating to what outcome the learners are supposed to achieve. As Breen (1989) has pointed out, the task-as-workplan is to be distinguished from the task-as-process (i.e. the activity that transpires when particular learners in a particular setting perform the task). As we will see, the activity predicted by the task-as-workplan may or may not accord with the activity that arises from the task-as-process. Definitions of 'task' typically relate to task-as-workplan."

It should come as to no surprise that because tasks are typically defined as they conceptualized during task-as-workplan (i.e., with specific objectives in mind), definitions will vary, sometimes quite considerably. Bygate *et al.* (2001a) also claim that the difference between task definitions is a result of specific research agendas. For instance, sometimes tasks are used because they are thought to provide an authentic medium for communication (e.g., using newspapers to find a job). In this situation, a task would be defined as an authentic communicative device (see Nunan 2005; Candlin 1987).

On the other hand, researchers working in a more controlled, laboratory setting, may think of tasks as an effective data elicitation device. In this scenario, tasks may be defined as a medium for elicitation (see Ellis 2003, pp. 2-5 for a detailed account of task definitions). Because of the variation that exists in attempting to define tasks, examples of task definitions will not be included. This will avoid a lengthy and confusing discussion on why one researcher uses a certain term another researcher does not (again, task definitions are dependent on research objectives).

There is, however, an underlying principle in each definition, as the previous quote has identified. That is, tasks can be defined during two stages (Thorne 2005). The first stage is task-as-workplan; this stage represents conceptualizations of what *should* occur. The second stage is task-in-process; this stage represents the *actual* occurrence of talk. Because the objective of this thesis is to examine the relationship between task-as-workplan and task-in-process, the following definition was created to emphasize the importance of both perspectives.

A task is an 'interactional blueprint' that establishes, but by no means restricts, a 'framework' in which task-takers are to work. The interactional blueprint includes both the design of a task and its intended outcome (task-as-workplan; e.g., information gap and the NfM). The framework is then interpreted and negotiated by the task-takers and may or may not correspond with its blueprint (task-in-process).

This working definition not only emphasizes the need to look at tasks from both perspectives, but also to examine the process (interpretations and negotiations) that links them together (see Coughlan and Duff 1994 for a similar view of task-based interaction); it is a definition that is centrally concerned with what task-taker do with tasks, and how this interaction relates to its original design. This idea of bridging perspectives is similar to Breen's (1989) 'task outcomes', though he is more concerned with the pedagogical significance of successfully completing tasks (cf. the more methodological oriented approach of reconciling task perspectives discussed in this thesis).

Now that a definition of task has been established vis-à-vis task-as-workplan and task-in-process, the following section will elaborate on the idea of task perspectives (N.B. the issue of task perspectives, as it is related to the epistemological and methodological tenets of ethnomethodology and CA, is discussed in Chapter 3).

2.2.1 Task perspectives

A perspective in relation to an understanding of task can be taken from either a task designer or task-taker point of view (Ellis 2003). A perspective taken from a task designer standpoint entails what a task was intended to do. A task-taker perspective is the actual occurrence of talk. Breen (1987, p. 23) summarizes this relationship by stating, "Whilst the objectives of the task will have been reasonably precise, actual learner outcomes are often diverse, sometimes unexpected, and occasionally downright disappointing."

He (ibid., p. 25) goes on to say, "When considering what happens during language learning tasks, we can initially distinguish between the original task-as-workplan and the actual *task-in-process*. It is the latter which generates typically diverse learning outcomes, and the quality and efficacy of any task must be traced directly to its use during teaching and learning." This last statement underscores the methodological objective of this thesis. That is, the 'quality and efficacy' of tasks will be examined by investigating the relationship between task-as-workplan and task-in-process.

Coughlan and Duff (1994) also distinguish between what is planned during task-as-workplan, and what occurs during task-in-process. Both researchers, however, use the terms task and activity to differentiated between 'what should' and 'what does' occur in task-based interaction, respectively. Their reasons for differentiating between task and activity was largely influenced by the variability they found in the latter, even when the same task-taker completed the same task multiple times (see Section 2.2.2).

The idea that two perspectives exist is also well known in the social science literature (see Chapter 3 for a discussion on how task perspectives connect with ideas outside TBLT). Take Pike's (1966) etic-emic distinction, for example. An etic perspective sees phenomena from the outside, whereas an emic perspective sees phenomena from a participant standpoint. Etic perspectives rely heavily on preestablished constructs, such as NfMs in the case of the Interaction Hypothesis. Emic perspectives are more process oriented, where the focal point of analysis is on achieving an understanding of how things get done. With the Ellis and Breen definitions in mind (see above), a task-as-workplan falls within an etic standpoint, and depending on what type of methodological approach is adopted (e.g., quantification versus qualification), a task-in-process can be taken from either standpoint.

For example, CA believes context is self-renewing, and therefore difficult to determine *a priori* (i.e., emic). That is to say, task-takers have the ability to reinterpret task-as-workplan multiple times during the completion of a task (N.B. this notion has methodological implications that will be discussed in Chapter 3; see Section 3.3.1 for an extensive discussion on etic and emic issues). As a result, CA adopts an emic approach to task-in-process because it is believed that task perspectives will not always coincide (Breen 1987).

Many task-based interaction researchers acknowledge task perspectives (e.g., Ellis 2003; Nunan 2005). However, as mentioned in Chapter 1, tasks are predominately defined within a task-as-workplan perspective (Ellis 2000). While this may be necessary for particular research frameworks (see Bygate *et al.* 2001a), and unproblematic in light of classifications (cf. attempting to define tasks from a constantly shifting task-in-process standpoint), attention must be given to the fact that a task-as-workplan will be

reconstructed according to task-takers' idiosyncratic ways (Breen 1989; Mondada & Pekarek Doehler 2004; Slimani-Rolls 2005).

For example, task-based interaction researchers working within a more etic, task-as-workplan approach, may want to quantify certain interactional features because it is believed that such features promote language acquisition (e.g., Foster & Ohta 2005). While such a methodological framework may require researchers to focus on preconceived concepts or categories (e.g., information gaps and NfMs), the rich and dynamic characteristics of task-in-process are relegated to statistical variables. Consequently, task perspectives are not taken into consideration under an etic, task-as-workplan approach.

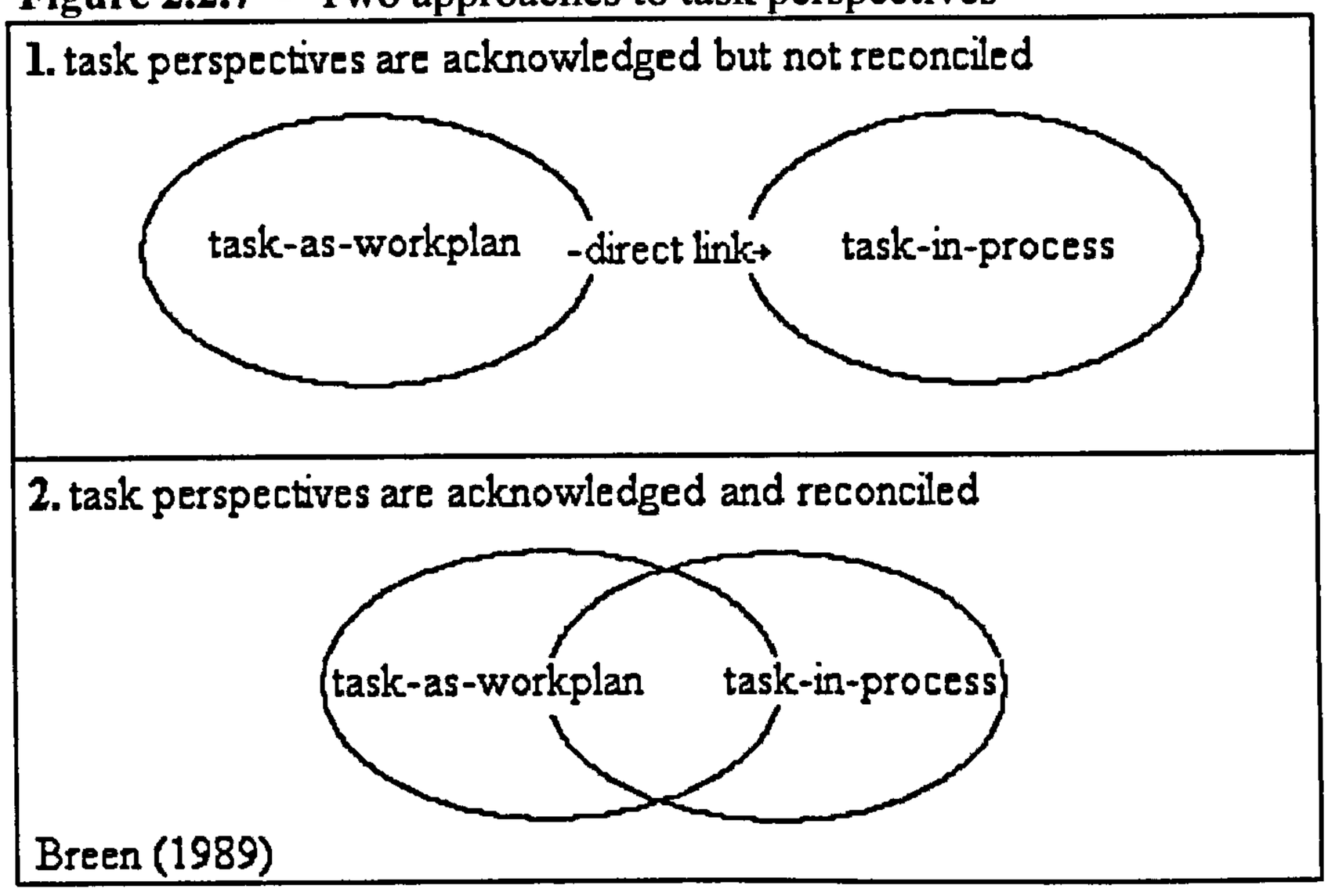
However, Coughlan and Duff (1994) and others (e.g., Kumaravadivelu 1991) have shown that task-takers' interpretations and understandings of tasks are variable and dynamic. This invariably leads to task-in-process variation (Seedhouse 2005). It is for this reason that a comprehensive understanding of task must take into consideration both task perspectives. Task perspectives, therefore, are an ontological issue in regard to TBLT (i.e., task-as-workplan and task-in-process are not theoretical hearsays) because the perspective taken to understand TBLT will provide different interpretations (e.g., etic versus emic).

As Samuda and Rounds (1993, p. 125) have said, "Rather than start from the structure of the task…look at the *task in action* and examine what kinds of interactional demands it placed on participants, and from this derive features by which the task could be analyzed." In this case, tasks should be understood by accounting for the interplay between task-as-workplan and task-in-process. The following section will now discuss how these perspectives have been reconciled (see Chapter 5 for how this is done).

2.2.2 Reconciling task-as-workplan and task-in-process

It has been established in the previous section that both task perspectives are essential in comprehensively understanding tasks. Examples were given in regard to both perspectives, but discussions on how these two perspectives interact were absent. It is the purpose of this section to introduce the idea of reconciling task-as-workplan and task-in-process. While most task-based studies acknowledge task perspectives, there are two ways it has generally been done. Figure 2.2.7 shows each approach in its graphical form.

Figure 2.2.7 - Two approaches to task perspectives



The first approach examines task perspectives autonomously (shown as two separate ovals with a direct link). Examples include studies that do not investigate the process of reaching a task outcome (e.g., Dufficy 2004; Iwashita 2003). The second investigates task perspectives dependently, thereby acknowledging the process that links them together (shown as two meshing ovals). The latter can be seen as reconciling task perspectives (e.g., sociocultural and conversation analytic approaches; Mondada & Pekarek Doehler 2004; Ohta & Nakaone 2004), whereas the former does not.

A large portion of the task-based interaction literature falls within the first approach (e.g., Long 1981; Porter 1986; Smith 2004; Mennin 2003; Gonzalez-Lloret 2003;

Doughty & Long 2003). Most of these studies adopt a more quantitative, positivistic approach to data analysis (see Seedhouse 2005; Ellis 2003). Under this approach it is common to see the deviations in task-in-process as a result of a particular set of task characteristics (e.g., task dimensions and the NfM; see Table 2.1). This can be seen as acknowledging task perspectives, but not reconciling them. Furthermore, although these studies seek to validate task-as-workplan by quantifying the number of interactional features that occur in task-in-process (see Section 2.4), the interpretations and negotiations that link the two perspectives together are not investigated. In other words, while these studies attempt to empirically validate task characteristics with talk that is representative of SLA (Ellis 2000), the significance of task-as-workplan and task-in-process as a dynamic interchange is not acknowledged (for recent studies that examine this relationship see, Markee and Kasper 2004; Mondada and Pekarek Doehler 2004; Mori 2004; He 2004; Markee 2004; Kasper 2004; Young and Miller 2004). Overlooking this interpretive feature weakens the validity of a task because it is the interpretations and negotiations that help bridge task perspectives (see the next section for a discussion on construct validity).

Coughlan and Duff (1994), Kumaravadivelu (1991), and Duff (1986, 1993), for example, all report on the ways in which task-in-process can change according to perceptions, goals, social contexts, and procedures. The Coughlan and Duff (1994) study is an excellent example; in their data, the process/outcome of a task changed over time, though the task and task-taker did not. Their results led them to believe that different interpretations and negotiations will take place, even if the same person repeats the same task. The second approach in Figure 2.2.7, therefore, stresses the need for task-based interaction researchers to "...be more cognizant of the subjects' perspectives of the tasks, in order to better understand what they perceive to be the goals, procedures, and

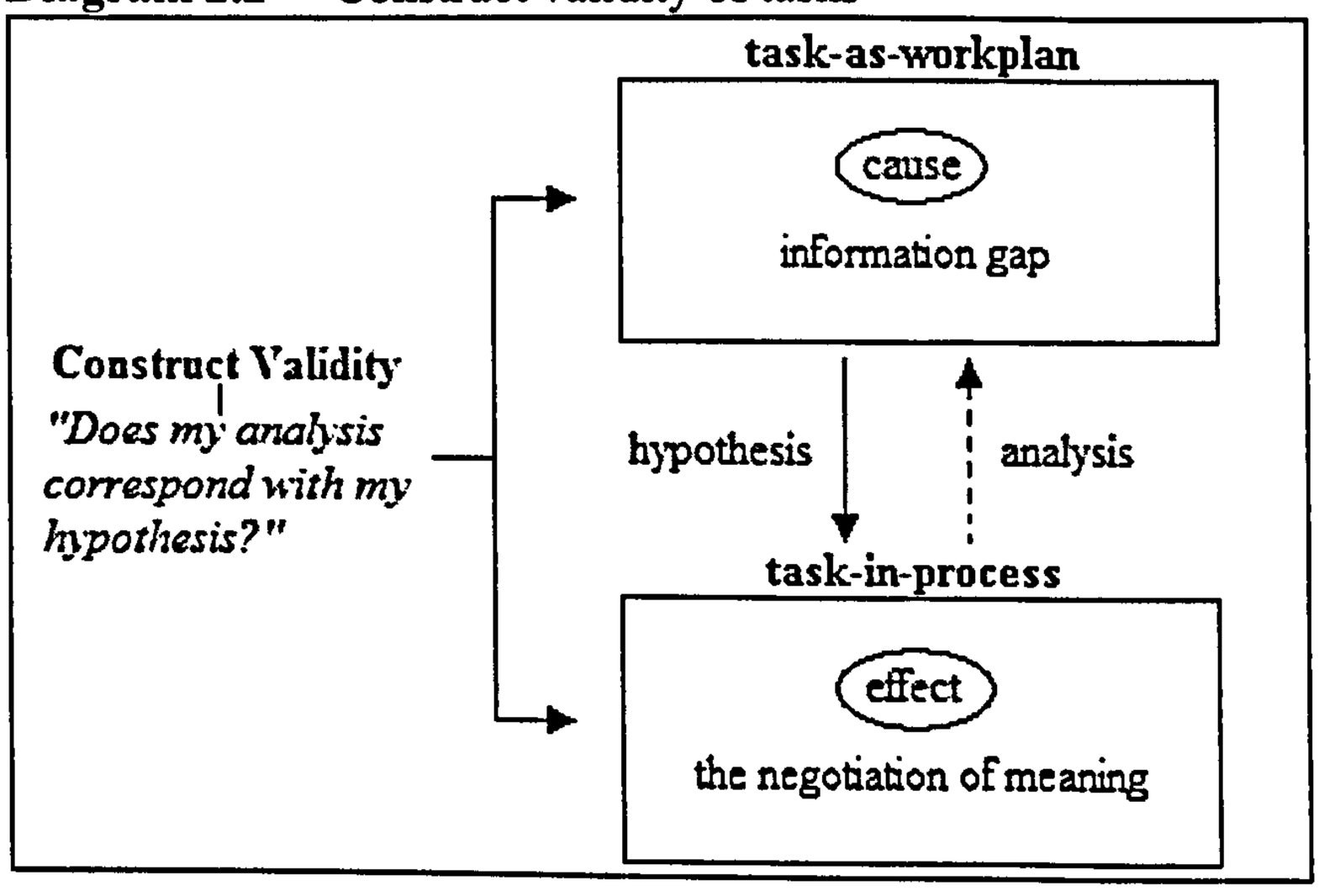
significance of the tasks" (Duff 1993, p. 86). One way of achieving this understanding is to adopt a more holistic, qualitative approach to data analysis (see Chapter 3 for detailed discussions on how this can be accomplished).

As mentioned in previous sections, most task-based research is underpinned by the assumption that tasks can induce a particular type of talk or behavior (i.e., there is a relationship between what tasks are claimed to do and what task-takers co-construct *in situ*). Now that the two approaches to task perspectives have been presented and discussed in detail, the following sections will introduce the methodological implication of reconciling task perspectives.

2.2.3 Construct validity

Construct validity is "...the assessment of whether a particular measure relates to other measures consistent with theoretically derived hypotheses concerning the relationships among concepts" (Zeller 1988, p. 326). Construct validity, as it is related to this thesis, is the bridge between what a task is assumed to provide (task-as-workplan), and what actually occurs (task-in-process). Specifically, this thesis will investigate the construct validity of the claim that tasks encourage task-takers to NfM. This is represented in Diagram 2.2 (N.B. see Table 2.1 for other examples).

Diagram 2.2 - Construct validity of tasks



As shown in the diagram above, the construct validity of tasks is making sure your hypothesis is actually borne out in analysis. In this case, it is *hypothesized* that information gaps will *effect* opportunities to NfM (this process is represented by the down arrow). To ensure construct validity, *analysis* must be conducted to determine whether the NfMs are a result of the *cause* (this process is represented by the dotted, up arrow). In other words, construct validity is ensured when the theoretically driven hypotheses are measuring what is borne out in analyses (Zeller 1988). Breen's (1987) task-as-workplan and task-in-process will be used in this thesis to represent cause and effect. Though Breen (1987) does not explicitly discuss construct validity, he makes the distinction between the task-based hypotheses formulated during task-as-workplan, and the subsequent and often diverging task-in-process. The significance of construct validity is that it "…is most appropriate for most questions in social science research. Construct validity not only has generalized applicability for assessing validity of social science measures, but it can also be used to differentiate between theoretically relevant and theoretically meaningless empirical factors" (Zeller 1988, p. 329). A better understanding of task-based interaction, therefore, must examine its cause and effect assumptions. Zeller and Carmines (1980) identify three steps to construct validation. Each of the following steps will be discussed in relation to this thesis.

1. First, the theoretical relationship between the concepts themselves must be specified. (Sections 2.2.1 – 2.2.3 have discussed tasks in relation to task-as-workplan and task-in-process; Section 2.5 will review tasks and the NfM.)
2. Second, the empirical relationship between the measures of the concepts must be examined. (Chapter 5 will analyze and attempt to reconcile tasks and the assumption that they promote the NfM.)
3. Finally, the empirical evidence must be interpreted in terms of how it clarifies

the construct validity of the particular measure. (Chapter 6 will discuss the findings of this thesis in light of the literature review chapter.)

Zeller and Carmines (1980, p. 81)

It is crucial at this point to briefly discuss how construct validity is related to research methodologies. Though construct validity is a concept that is traditionally understood from a quantitative, positivistic framework, a qualitative methodology, such as the one employed in this thesis, can also be used to better understand construct validity and its role in task-based interaction (see Chapter 3 for specific examples and references). Because the assumption that tasks encourage task-takers to NfM is largely represented by a quantitative paradigm (Seedhouse 2005), there is a tendency to assume "...that task design [task-as-workplan] and implementation [task-in-process] are closely matched and that, consequently, learning opportunities can be manipulated and maximized through task design" Kasper (2004, p. 553).

However, research has shown that these two perspectives are not closely matched (e.g., Duff 1986, 1993), and reconciling task-as-workplan with task-in-process is crucial to construct validity because the latter often deviates from the former (Murphy 2003). While this may sound commonsensical, Littlewood (2004) claims that there is a tendency in task-based interaction research to discuss tasks as only workplans (e.g., definitions of tasks; see Section 2.2). As stated before, construct validity as it is discussed in this thesis is related to task perspectives, and the assumption that tasks can encourage task-takers to NfM. The ways in which task perspectives have been accounted for under different approaches to task-based interaction will be discussed in the next sections.

2.3 Approaches to Task-Based Interaction

This section will introduce the frameworks that have contributed to the study of task-based interaction. Skehan (2003) identifies three well-established research frameworks.

These investigatory domains are the psycholinguistic, sociocultural, and cognitive approaches to task-based interaction. Although this thesis is particularly concerned with the claims put forth by the psycholinguistic approach, a short introduction to the sociocultural and cognitive approaches will help distinguish the salient characteristics in each perspective. These three approaches also fit within one of the two approaches to task perspectives (Section 2.2.3). The following section will discuss each approach from this notion.

2.3.1 Three approaches to task-based interaction

The psycholinguistic approach to task-based research claims that certain task characteristics provide task-takers with opportunities to simultaneously communicate for meaning and implicitly negotiate form. This tradition is largely influenced by the thought that NfMs are a key variable in regard to SLA (Long 1996; N.B. task-based interaction studies inspired by Long have been recently associated with a psycholinguistic approach to TBLT; see Ellis 2000; Skehan 2003). Consequently, one of the psycholinguistic aims is to identify task characteristics that provide an abundance of NfMs (Pica *et al.* 1993; Ellis 2000). An example of a task-as-workplan within this approach is an information gap. This relates to the distribution of information during task-in-process. As mentioned before, when only one task-taker possesses the information needed to complete a task, the task is a one-way information gap. Two-way information gap tasks distribute information to both task-takers. The latter is said to promote more NfMs than the former (Ellis 2000). However, the psycholinguistic approach does not explore the interactional process of NfMs (e.g., misinterpretation of task objectives). Thus, task dimensions, such as information gaps, are thought to establish and maintain the interactional framework (i.e., there is a direct link between the implementation of a task-as-workplan and the ensuing task-in-process). Put in another way, task-based interaction studies within the

psycholinguistic approach have traditionally adopted the non-reconciliation approach to task perspectives. As a result, there is a potential threat to the construct validity of tasks because the interpretations and negotiations that may also shape task-in-process are not investigated.

On the other hand, the sociocultural perspective to task-based interaction does not limit its analyses to NfMs, but to a broader concern of how task-takers come to their own understanding of task objectives and meanings (Ohta 1995; Swain & Lapkin 2001). Whereas the psycholinguistic perspective sees tasks and subsequent learning as a result of input processing (primarily internal capacities), the sociocultural approach assumes learning is processed through the co-construction and reinterpretation of tasks (i.e., internalization begins with the social milieu; Lantolf & Appel 1994). It is the concern for co-constructed knowledge within the social milieu that aligns the sociocultural perspective with the second, reconciliation approach to task perspectives. For example, the social milieu may include anything from classroom norms to task instructions. The sociocultural approach assumes that the talk occurring in task-in-process is not just a product of the task itself, but all variables involved in moving a workplan to a process. Therefore, although task-based researchers working within a sociocultural approach aim to validate tasks by examining interactional features (e.g., dictogloss tasks and language related episodes; Swain, Brooks, Tocalli-Beller 2002), its theoretical uptake "...moves beyond properties of individual learner language [cf. the psycholinguistic approach] to examination of the creation of context, construction of task, coordination of goals, affective variables, learner cognition, and learner collaboration" (Ohta 1995, p. 96).

Finally, the cognitive approach to task-based interaction is equally concerned with the interactional features occurring in task-in-process (Bygate 2001), yet much of the analytical focus is linked to the psychological processes involved in completing tasks

(Skehan 2003). Within this framework, task features (e.g., structured information) and task variables (e.g., task repetition) are said to be key factors in influencing the psychological aspects of language production (i.e., fluency, accuracy, and complexity). For example, Mennin (2003) examined whether the spoken language of his students' final presentation would improve if they were given the opportunity to rehearse. Similarly, Lynch and Maclean's (2001) study incorporated a poster presentation task that required their students to repeat the task to different listeners. Both studies found that the rehearsal and repetition variables that were investigated were beneficial to complex language production. The theoretical underpinning of the cognitive approach does not, however, specifically concern itself with the interpretation and negotiation of task objectives (Robinson 2005).

Moving from a task-as-workplan to a task-in-process perspective, all three frameworks are similar in that they are interested in how tasks can provide ample learning or communicative opportunities. For example, much of the task-based research taken from these approaches begin their analysis with a task-as-workplan (e.g., information gap tasks for the psycholinguistic approach, dictogloss tasks for the sociocultural approach, and task repetition for the cognitive approach), and end with a focus on task-in-process (e.g., NfMs for the psycholinguistic approach, language related episodes for the sociocultural approach, and language complexity for the cognitive approach). However, apart from the sociocultural approach to task-based interaction (e.g., Mondada & Pekarek Doehler 2004; Mori 2004), little attention is paid to why task-in-process may not correspond to task-as-workplan. The originality of this thesis is that the psycholinguistic assumptions of task-based research (e.g., task characteristics can promote NfM) will be investigated from both a task-as-workplan and task-in-process perspective (something only recently done from a sociocultural standpoint). Table 2.3.1 summarizes the previous discussion.

Table 2.3.1 - Three approaches to task-based interaction

	Approach taken to task perspectives (*see Figure 2.2.3*)	**Task-as-workplan** (*A*)	**--- Link -->** (*see Figure 2.2.7*)	**Task-in-process** (*B*)
Psycholinguistic Approach	non-reconciliation approach	e.g., information gap (two-way)	link is traditionally not investigated	more NfM
Sociocultural Approach	reconciliation approach	e.g., dictogloss	interpretation and negotiation of task-as-workplan may influence task-in-process	more language related episodes
Cognitive Approach	non-reconciliation approach	e.g., task repetition	link is traditionally not investigated	more complex language production

Only the psycholinguistic approach to task-based research will be examined in the subsequent review (as will be demonstrated in Chapters 3 and 4, most of the research questions posed in this thesis are taken from a psycholinguistic approach). This will not only offer a more in-depth investigation into the claims put forth by the psycholinguistic perspective (a dominant research framework in task-based studies), but will also allow for a more exhaustive analysis CA is known to provide (see Section 3.2). Skehan (2003), Ellis (2000; 2003), and Bygate *et al.* (2001b), all provide excellent reviews on the diversity in task-based studies. Nevertheless, the sociocultural and cognitive approaches will be discussed when relevant to analysis.

2.4 The Psycholinguistic Approach to Task-Based Interaction

The previous section briefly introduced the main approaches to the investigation of tasks and task-talk. It is the purpose of this section to outline the details that make up the psycholinguistic approach to task-based interaction. As mentioned above, the key objective in the psycholinguistic approach is to identify the properties in a task that are believed to enhance language development (Doughty & Long 2003). As a result, certain task characteristics are believed to shape the quantity and quality of task-talk (Doughty &

Pica 1986). For instance, the difference between the participatory structure of 'information gap tasks' and 'opinion gap tasks' is a task characteristic believed to influence language learning (i.e., more opportunities for the NfM). Because information gap tasks require the exchange of information and opinion gap tasks do not (i.e., they are optional), opportunities for NfM are believed to be more prevalent in the former task structure (Ellis 2003). The specific relationship between task characteristics and NfM will be examined in subsequent sections.

An underlying theme in this approach is that a task-as-workplan is closely aligned with its task-in-process (Ellis 2000). In other words, a task is understood from the standpoint of a task-as-workplan. While it was acknowledged that a conceptualization of tasks from a task-as-workplan may be necessary for particular research methodologies and descriptive purposes (see Section 2.2.3), the construct validity of tasks is dependent on both task-as-workplan and task-in-process (see Section 2.2). This recurrent theme is especially important because this thesis will attempt to account for the interactional links between task workplans and processes (see Chapter 5).

Finally, tasks, as seen through a psycholinguistic lens, are considered the primary source of input for language acquisition and use. Ellis (2000, p. 197) reiterates this as assuming "...a task is a device that guides learners to engage in certain types of information-processing that are believed to be important for effective language use and/or for language acquisition from some theoretical standpoint." Although several theoretical standpoints have been applied under the psycholinguistic guise (e.g., negative versus positive evidence, White 1996; recasts, Lyster 2004; communication strategies, Yule & Tarone 1997), Long's (1996) Interaction Hypothesis is the first significant contribution that has materialized and continues to influence task-based research (Skehan 2003). The

next section will explicate this theoretical standpoint, and discuss the type of task-based research it has spawned (Section 2.5).

2.4.1 The Interaction Hypothesis: Input-Interaction

Before discussing the task dimensions and interactional features that have been the focus of a psycholinguistic approach to task-based interaction, it is important to discuss Long's (1996) Interaction Hypothesis. The Interaction Hypothesis claims that the 'NfM', "...and especially negotiation work that triggers *interactional* adjustments by the NS or more competent interlocutor, facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways" (Long 1996, pp. 451-452). He (ibid, p. 452) goes on to maintain that "...utterances by a competent speaker, such as repetitions, extensions, reformulations, rephrasings, expansions and recasts...helps [sic] reveal the meaning of new forms and so make the forms themselves acquirable." From this updated account (see Long 1983a for an earlier version of the Interaction Hypothesis), the Interaction Hypothesis can be seen as a compilation of input and interactionist theories to SLA. These include the language learning roles of discourse (Hatch 1978), input (Krashen 1982; Schachter 1986), output (Swain 1993), and attention (Schmidt & Frota 1986). This multiplicity of perspectives has been more recently framed as the 'Input-Interaction Hypothesis' (Gass 2004).

It can be summarized then that according to the Input-Interaction Hypothesis the interactional features that are believed to promote SLA are comprehensible input, feedback, output, and attention. It is the area of feedback that has largely been used to study the negotiation of input and output (e.g., for negotiation in tasks, see Varonis & Gass 1985; Pica, Lincoln-Porter, Paninos, & Linnell 1996; Pica 1994; Gass & Varonis 1994; Lyster & Ranta 1997; Iwashita 2003; for negotiation in interviews, see Brooks 1992; for negotiation in classrooms see Kasper 1985; Panova & Lyster 2002; Pica &

Washburn 2002; Oliver & Mackey 2003; Morris & Tarone 2003; Lyster 2004; for negotiation between NS and NNS, see Long 1981, 1983a; Gass & Varonis 1985a; for negotiation in writing tasks, see Swain & Lapkin 2001; Swain *et al.* 2002; for criticisms, see Sheen 2004; Swan 2005). Because the Input-Interaction Hypothesis has had a significant impact on the myriad contributions to task-based research (e.g., Long 1983b, 1985; Pica 1988, 1991; Mackey, Oliver, & Leeman 2003; Mackey 1999; Liebscher & Dailey-O'Cain 2003; Gonzalez-Lloret 2003; Smith 2004), this thesis will only investigate the area of research that aims to validate tasks by correlating task characteristics with the NfM (Pica *et al.* 1993). Before reviewing the literature on this issue, the next section will outline some critiques of the Input-Interaction framework.

2.4.2 Criticisms of the Input-Interaction framework

In Section 2.4, it was briefly mentioned that the participatory structure of 'information gap tasks' and 'opinion gap tasks' led to different opportunities for NfM; instances of NfM, of course, seen as conducive to SLA. This relationship is a prototypical example of how task-based research is conducted within the Input-Interaction framework (Pica *et al.* 1993). That is, because NfMs are believed to provide comprehensible language and attention to task-takers, they are quantified to assess the SLA value of tasks (White 1999 calls this a task-dependent NfM). The problem with the quantification of NfM is that the quality of such interactional modification plays a secondary role (see Nakahama, Tyler, and van Lier 2001).

As will be shown in the data analysis of this thesis, NfMs can cater to both linguistic and procedural issues (Section 3.2.3 explains how NfMs only represent a small portion of what a conversation analytic understanding of repair provides). Quantifying such occurrences without differentiating between the different types that exist, therefore, does not provide a complete picture of repair in task-based interaction. It has even been

claimed that implementing predefined categories for the sake of quantification will "...provide a distorted and impoverished picture of the nature of interaction, a picture in which, ironically, the *inter*-active nature of interaction is completely lost" (Hauser 2003, p. 167; see Schegloff 1993 for a detailed account of the problems in quantifying interactional data).

Furthermore, the way NfMs are analyzed under the Input-Interaction framework can be seen as categorical; that is, they are preformulated and analyzed outside of the local context (i.e., etic; also see Block 2003 for a book length discussion on such issues). The problem with this is, "Category systems, because they were *preformed or preformulated* in advance of the actual observation of interaction in a particular setting, would structure observations and produce results that were consistent only with their formulations, thereby obscuring or distorting the features of interactional phenomena" (Psathas 1995, p. 8).

This quote highlights the methodological distinction between a task-based interaction study informed by the Input-Interaction framework on the one hand (see Ellis 1994 for a more in-depth discussion), and a conversation analytic understanding of task-based interaction on the other. That is, whereas the former approach analyzes data from a predefined, outside standpoint (task-as-workplan), CA examines data from a moment-by-moment, inside standpoint (see Section 3.3.1 for the distinctions between etic and emic approaches to data; N.B. Figure 2.5.1 provides examples of how an analysis of task-based interaction can be taken from the outside, using predefined constructs, whereas all of the extracts provided in Chapter 3 illustrate an inside, participant-oriented analysis). Therefore, the perspective taken in this thesis sees the minimization and categorization of talk as a significant limitation to the study of task-based interaction.

Lastly, in a recent NfM study, Foster and Ohta (2005) identify, in addition to the problems with quantifying NfMs, four general concerns. These issues are NfMs (1) "…can be tedious and face threatening;" (2) are "…typically lexical in nature and not morphosyntactic;" (3) "…hard to identify because its surface structures are often ambiguous;" and (4) "…may not provide an accurate depiction of the value of a task in providing participants with opportunities for language learning" (Foster & Ohta 2005, p. 407). The next section will now examine what is meant by 'negotiation' and 'meaning' in NfM.

2.5 The Negotiation for Meaning

The Input-Interaction Hypothesis proposes that the interactional modifications that interlocutors use to overcome some communicative difficulties will allow the speaker to juxtapose an 'incorrect' utterance with a correct one, thereby shifting important attentional resources to the miscommunication at hand (see Doughty and Williams 1998a for an in-depth discussion on this controversial issue). Task-based studies informed by this theoretical perspective are particularly concerned with the characteristics of tasks (e.g., information gap) that will provide a basis for the predictability of interactional features (e.g., NfM). This portion of the literature review will focus on the task characteristics that have been claimed to offer task-takers with opportunities to NfM. On a final note, a working definition of the NfM will not be included here because this will be investigated using a conversation analytic approach (see Foster and Ohta 2005 for current definitions of NfM). Before identifying the dimensions that have been examined to create a psycholinguistic understanding of tasks, it is important to understand what is meant by 'negotiation' and 'meaning'.

2.5.1 Negotiation: Type and sequence

There are two ways that NfMs have been investigated in Input-Interaction studies. The first deals with *types* of NfMs. These can include anything from mispronunciations to grammatical correction. Long 's (1980) comprehension checks, clarification requests, and confirmation checks (the three C's) are classic examples of NfM. The following extract provides examples of the three C's.

Example Extract 5: The three C's
NS: And right on the roof of the truck place the duck. The duck.
NNS: I to take it? Dog? **(a)**
NS: Duck.
NNS: Duck.
NS: It's yellow and it's a small animal. It has two feet.
NNS: I put where it? **(b)**
NS: You take the duck and put it on top of the truck.
NNS: Duck? **(a)**
NS: Do you see the duck? **(c)**

(a) Confirmation check: Moves by which one speaker seeks confirmation of the other's preceding utterance.
(b) Clarification request: Moves by which one speaker seeks assistance in understanding the other speaker's preceding utterance.
(c) Comprehension check: Moves by which one speaker attempts to determine whether the other speaker has understood a preceding message.

(Modified from Pica *et al.* 1987, p. 740; cited in Mitchell and Myles 2004, p. 168)

The second deals with how NfMs are *sequenced* within the turn-by-turn realities of communication. Gonzalez-Lloret's (2003) modified model of negotiation is a recent example of sequenced NfMs. As with task-based research in general, the type and sequence of NfMs have been investigated from a number of different perspectives (e.g., for communication strategies, see Wagner and Firth 1997; for recasts, see Mackey *et al.* 2003). For this reason, the discussion below will only include the type and sequence that are relevant to the current thesis.

Negotiation is the action of interactional modifications to overcome communicative difficulties. This has been a fundamental concern for task-based interaction researchers working within the Input-Interaction framework (e.g., Smith 2004; Hall 2004). Pica

(1994, p. 494) similarly defines negotiation as "…the modification and restructuring of interaction that occurs when learners and their interlocutors anticipate, perceive, or experience difficulties in message comprehensibility." Again, Long (1980) uses the terms comprehension checks, clarification requests, and confirmation checks to refer to types of interactional modifications; self and other repetitions are also included (see Markee and Kasper 2004, for a discussion on the limitation of the three C's). Repetitions entail precise reiterations or semantic glosses. Confirmation checks are utterances "…that seek to confirm that the material in an interlocutor's previous utterance has been heard or understood," clarification requests are clarifications of anything "…in the preceding written or oral discourse," and comprehension checks are "…utterances that attempt to confirm that the listener has understood what the speaker has said" (Williams, Inscoe, Tasker 1997, pp. 310-312).

The three C's and repetitions have been the focus of many analyses (Ellis 2003). For many task-based interaction studies (e.g., Gonzalez-Lloret 2003; Gass & Varonis 1994; Doughty & Long 2003), these types of NfMs represent not only comprehensible input and output, but also the necessary attention to make use of such adjustments (see Section 2.4.1). It is no wonder why many task-based studies within the Input-Interaction framework seek to validate tasks as effective SLA devices by quantifying NfM types (see Long and Porter 1985, p. 219), and to subsequently associate these numerical sums to a particular task characteristic (see Table 2.1). This quantitative approach to investigating task-in-process assumes that there is no need to reconcile task perspectives (see Section 2.2.2). Recent Input-Interaction studies have over the years attempted to broaden this approach by incorporating NfMs within a more comprehensive model of negotiation (Gonzalez-Lloret 2003; Doughty & Long 2003).

Pica *et al.* (1991), for example, place repetitions and the three C's in a sequence of negotiated moves. Here NfMs begin with a 'trigger' (communication trouble), which is followed by a 'signal' (e.g. the three C's), and finally the trouble source is repaired with a 'response' (e.g., repetition or reformulation). An optional 'reaction' to response stage is available for extensions or responses (Varonis & Gass 1985; Gonzalez-Lloret 2003). Nakahama *et al.* (2001) see the trigger and signal as the most significant in that the signal not only identifies communication trouble (i.e., the trigger), but also makes such trouble conditionally repairable (i.e., the response and reaction).

Figure 2.5.1 shows how NfMs fit within a larger sequence of negotiated moves (indicated by bold-type font). Although this model sequences NfMs, it does not offer any framework for the investigation of task perspectives (i.e., it still fails to account for how the talk occurring in task-in-process relates to task-as-workplan). It can be recalled in Section 2.2.2 that this approach is of the non-reconciliation of task perspectives type. Example Extract 6, which follows this figure, illustrates how this sequential model is used to analyze an episode of NfM. These task-takers speak Spanish as their mother tongue (N.B. it is important to reemphasize that this model represents a typical form of analysis under an Input-Interaction framework, and not the methodology adopted in this thesis).

Figure 2.5.1 - Negotiation Model

Trigger →	**Signal →**	**Response →**	**Reaction**
lexical item phonetic error language complexity task complexity	confirmation check clarification request comprehension check	repetition expansion reformulation use of L1	exclamation non-verbal correction

(Gonzalez-Lloret 2003, p. 92)

Example Extract 6: Trigger-Signal-Response episode

1 S7: when you leave the elevator (**Trigger** – lexical item)
2 S8: here but we can not go other! only two rooms (**Signal** – clarification request)
3 S7: where is the elevator?
4 S8: what is the "ascensor"? I don't understand, meaning "ascensor"? (**Signal** – clarification request)

5 S7: in English is the elevator (**Response** – English use)
6 S8: oh! you want to go another floor? (**Reaction** – exclamation)

(Modified from Gonzalez-Lloret 2003, p. 93)

In summary, this section has introduced two ways in which negotiation is investigated within the Input-Interaction framework. These were the type and sequence of NfMs. The types of NfMs were discussed primarily in relation to Long's (1980) three C's (these constructs are important to the Input-Interaction framework because they are thought to be important to SLA). The sequence of NfMs was framed within a larger model of negotiated moves. Gonzalez-Lloret's (2003) version of the negotiation model illustrated how interactional modifications fit within a series of opportunities. How this approach fails to reconcile task perspectives will be discussed in Sections 2.5.3 and 2.5.4. The next section will now examine the second half of the 'NfM' concept.

2.5.2 Meaning: A focus on what?

The last section discussed what is meant by negotiation, in the NfM. This section will focus on the meaning half of the NfM. In other words, what is being negotiated? In task-based interaction research, meaning is generally viewed as a trichotomy consisting of a focus on meaning, a focus on form, and a focus on formS (Long & Robinson 1998). A common thread underlying each focus is the role grammar plays in SLA. On one side of the spectrum you have a focus on meaning, where language learning is thought to be most effective when language is learned incidentally (see Doughty and Williams 1998a). In this view, grammar should not be explicitly taught, but should naturally arise out of the communicative efforts of language users (Krashen 1982). On the opposite side of this spectrum you have a focus on formS, where specific grammatical units are broken down into a sequence of instruction. A focus on formS adopts a grammatical piece meal approach. In between these two extremes is a focus on form. Here both formS and meaning are acknowledged, but meaning is viewed as a prerequisite for effective formS

processing (Long & Robinson 1998). Most definitions of tasks subscribe to a focus on form approach (i.e., a task should establish meaningful communication whilst incorporating a grammatical objective; see Ellis 2003).

While it is widely acknowledged that form and meaning go hand-in-hand (Doughty & Williams 1998b), a focus on meaning, form, and formS is viewed in the Input-Interaction framework as a process beginning and ending with a task-as-workplan (e.g., the notion that comprehension checks are valid indicators of a task's efficacy). That is, it is not the task-takers who determine where their focus will be, but the interactional framework established by task-as-workplan (see Chapter 3). While a task can establish an interactional framework, task-takers are by no means confined within it (see Sections 2.2). Again, the relationship between a task-as-workplan and the interactional framework it establishes, and the interpretations and negotiations occurring in a task-in-process, is the primary focus of this thesis.

If one accepts the fact that a particular focus on form or meaning is a result of task-takers, then one must also accept the fact that such a process begins with a task-as-workplan and ends with a task-in-process (and task outcomes). Yet, many investigations into whether task-takers focus primarily on form(S) or meaning do not take into consideration the task-takers' interpretations and negotiations that ultimately determine the focus (this problem will be clearly demonstrated in Sections 2.5.3 and 2.5.4). Specifically, task-takers will negotiate and construct their own interpretations of task-as-workplan (Mondada and Pekarek Doehler 2004; Kumaravadivelu 1991; Coughlan & Duff 1994; Duff 1993). Again, although neglecting interpretations and negotiations may be necessary for classificatory or investigatory objectives, the construct validity of tasks is contingent on confirming whether a task-in-process is the result of a task-as-workplan (see Section 2.2.1).

Swain and Lapkin's (2001) study also highlights the importance of interpretations and negotiations occurring in task-in-process. In their investigation, the collaboration between task-takers allowed for a simultaneous focus on form and meaning. In other words, although the dictogloss task in their study provided an intentional and primary focus on form(S), it resulted in meaningful communication and task completion. As researchers working within a sociocultural approach have discovered, the co-construction between task-takers is a rich and dynamic interactional process that should not be determined *a priori* (Ohta & Nakaone 2004).

Widdowson (1998) also stresses the difficulties in distinguishing between form and meaning. He states that learners will need to use both form and meaning in any communicative episode. Larsen-Freeman (1989) equally emphasizes the inseparability of form, meaning, and pragmatics. Here a well-formulated utterance is associated with its semantic appropriateness and contextual application. Finally, basing his interpretations partly from Levelt's (1989) model of language processing, Bygate (2001, p. 26) states "...language use involves establishing and working with form-meaning relations..." though "...second language production is bound to place strains on learners in terms of their managing form-meaning relations...this is the object of language learning." That is to say, learning and using a language is the management of language form and meaning. Specifically, language form and meaning cannot be dichotomized as it has been done under an Input-Interaction framework (see Ellis 2003). Attentional resources will need to be equally allocated to achieve well-balanced language production. As has been repeated in previous sections, well-balanced language production is not guaranteed by a carefully designed task-as-workplan.

A detailed discussion of form-meaning relationships is not the purpose of this thesis (see Doughty and Williams 1998a for a comprehensive account of the focus on form

debate). As demonstrated above, the issue is complex and controversial. The objective of presenting the three focuses of meaning is twofold. First, it is necessary to review how meaning is conceptualized in the NfM. Second, it is important to illustrate how the notion of task perspectives is applicable to the study of NfM. This thesis will attempt to investigate meaning by examining how task-takers continuously create and update an understanding of their task. Now that a clearer picture of the NfM has been established, the following section will discuss what type of NfM has been claimed to be a result of a particular set of task characteristics.

2.5.3 Task characteristics and the negotiation for meaning

Section 2.4 commenced with a discussion of the Input Hypothesis (Input-Interaction). It was demonstrated that task-based researchers informed by the Input-Interaction Hypothesis were centrally concerned with how tasks can be created in a way to provide more opportunities for the NfM. Sections 2.5.1 and 2.5.2 then reviewed what is meant by 'negotiation' and 'meaning'. This explication was important because the investigation of NfM has helped form a psycholinguistic typology of tasks (see Ellis 2000, p. 200).

This section will review the task-as-workplan characteristics that have been claimed to promote the NfM. As previously mentioned, the goal of studies such as these is to determine what task characteristics provide the best opportunities for SLA (for a recent example, see Smith 2005). On a final note, the task-based interaction studies that are reviewed in this section are mostly those that have been informed or influenced by the Input-Interaction framework. Task-based interaction studies informed by a sociocultural (e.g., Fortune & Thorp 2001) or cognitive approach (e.g., Skehan 2001) are not included in the interest of clarity and space (see Section 2.3.1).

In one of the earlier and most seminal studies investigating the NfM in task-based interaction, Long (1981) discovered that tasks requiring a two-way exchange of

information elicited more episodes of NfM than tasks requiring a one-way exchange of information (see Long 1980). It can be recalled that an information gap refers to the way information is distributed amongst task-takers in order for them to successfully complete tasks. In his study, NfMs were measured by isolating and quantifying interactional features, such as comprehension checks. Long (1981) believes the difference in the amount of NfMs is a result of two-way information gap tasks requiring 'genuine communication'. Because one-way information gap tasks restrict the distribution of referential information, they are thought to produce more artificial language.

However, these results should be interpreted with caution. First, it is important to look at the focus of analysis in Long's (1981) study; here the main objective was to analyze how NSs conversed with NNSs. Because of this, the study incorporated native English speaking dyads as a basis of comparison (i.e., NS-NS and NS-NNS dyads were used). Therefore, any NfM differences found may have occurred as a result of the NS element (Ferguson 1975; Shortreed 1993; Long 1983a, 1983b). Furthermore, as this thesis and the studies below will show, some one-way information gap tasks provide more NfM opportunities.

In a slighter different but equally seminal task-based study, Doughty and Pica (1986) looked at tasks that required either an obligatory (information gap) or optional exchange of information. Here tasks that required an exchange of obligatory information were shown to produce more interactional modification than tasks that did not require an exchange of obligatory information (N.B. the tasks consisted of NNS-NNS dyads). This was borne out in group work, but not teacher-fronted classrooms (Doughty & Pica 1986, p. 315). Although these results partially support Long's (1981) claim that an information gap component provides many opportunities for the NfM, Doughty and Pica (1986) did not compare the same participatory structure (i.e., one-way information gap versus two-

way information gap). That is to say, though these two studies appear to provide corroborating evidence, each study possess a unique set of research objectives, with a particular set of dyads.

Gass and Varonis (1985b) report that the one-way information gap task used in their study elicited more NfMs than a two-way information gap task. They concluded that because two-way information gaps provide more shared contextual information, the flow of communication would be smoother than that found in one-way information gap tasks (recall that in Long's 1981 study, two-way information gap tasks were thought to promote more NfMs). That is to say, because there is an asymmetrical distribution of referential information in one-way information gap tasks, task-takers are more likely to experience some type of communicative difficulty. The fact that studies such as these offer conflicting results underscores the need for task-based interaction studies to adopt a more contextual and sequential approach to the investigation of NfM (see Chapter 5).

In a more recent study, however, Slimani-Rolls (2005) discovered that two-way information gap tasks do indeed promote more episodes of NfM than one-way information gap tasks. Though these findings support the proponents of two-way information gap tasks (e.g., Long 1981, 1988; Pica *et al.* 1993), Slimani-Rolls (2005, p. 208) states that, "...one-way...tasks...seem to offer more scope for language manipulation and more opportunities for genuine communication" (recall that Long 1981 believes more genuine communication can be found in two-way information gap tasks). The conflicting interpretations as to why one task promotes more NfMs than the other may be a result of methodology (i.e., some researchers have shown that two-way tasks are better for NfMs, whereas others offer conflicting data; see Sections 2.4.2, 2.5.3, and 2.5.4). In the same study, Slimani-Rolls (2005) criticizes task-based interaction research for not accounting for learner idiosyncrasies and interpretation, two variables that are

largely ignored in the process of quantification (cf. reconciliation of task perspectives; see Section 2.2, and Chapters 3 and 5).

Nakahama *et al.* (2001) investigated the interaction occurring between NS-NNS dyads. Their study is noteworthy because they specifically set out to examine the interactional benefits of two-way participatory structures. Much like Doughty and Pica's (1986) investigation, this study compared the interaction between an open-ended conversation task (i.e., opinion gap) and a two-way information gap task (N.B. both tasks used in this study possess the same two-way participatory structure). Despite the larger number of interactional modifications occurring in the information gap task, the task-takers in their study appeared to produce more complex language in the open-ended task. The researchers concluded that even though NfMs were more prevalent in their information gap task, the complex language production in the open-ended task appeared to be more beneficial to SLA. In other words, Nakahama *et al.*'s (2001) results question the applicability of NfM to SLA.

Duff (1986) evaluated the interaction between a problem-solving task (information gap) and debate (opinion gap). Here the problem-solving task required task-takers to come to an agreement, whereas the debate required no mutual consensus. The dyads used in this study were NNS-NNS. Confirmation checks (recall the three C's) were found to be more abundant in the problem-solving task. Duff (1986, p. 17) attributes this difference to communicative structures, stating "The extended discourse…in D [debate] reduces opportunities for negotiation of input, since turn boundaries arise less frequently than in PS [problem-solving tasks]…" Although the objective of this study was to compare the interaction between open and closed task outcomes, this quote highlights the interactional influence of participatory structures. As the previous studies in this section have stated, information gap tasks require task-takers to focus on the exchange of

referential information. This communicative onus ostensibly puts more communicative strain on task-takers, therefore producing more opportunities for the NfM.

Pica and Doughty (1985) compared decision-making (two-way information gap) tasks conducted in teacher-fronted and student-centered classrooms. The task dimensions analyzed in this study included a required exchange of information and a closed outcome. The results showed that there were very little NfMs in both teacher-fronted and student-centered decision-making tasks. Pica and Doughty (1985 p. 247) concluded, "Decision making tasks [required exchange of information with a closed outcome], while potentially interactive, nevertheless do not *compel* participants to negotiate for message meaning." In other words, two-way information gap tasks do not provide many opportunities for task-takers to NfM (cf. Long 1981).

Pica (1987) also compared teacher-fronted classrooms with student-centered interaction. In both teacher-fronted and student-centered tasks, the two-way information gap task elicited more interactional modification than the more open-ended two-way decision-making task. Though these results appear to support Pica and Doughty's (1985) investigation, this study compared the two tasks as if they were structurally different. However, both tasks are structurally similar because they require a two-way exchange of information. The fact that both tasks are structurally similar, but produce conflicting interactional outcomes, underscores the need for a more fine-grained analysis of task-based interaction. That is to say, what this and other studies fail to account for is how task dimensions affect the completion of tasks.

For instance, analyzing only an information exchange task within teacher-fronted and student-centered classrooms, Pica (1987) reported that many more instances of interactional modification occurred when the teacher was not present. This suggests that teacher presence is an important variable that must be accounted for when reconciling

task perspectives (i.e., teacher presence may shape task-in-process). This finding should also be seen as further evidence against the notion that there is an unscathed link between task-as-workplan and task-in-process (refer to Section 2.2.3).

In an ambitious attempt to account for multiple task dimensions, Pica *et al.* (1991) investigated three types of tasks conducted by NS-NNS dyads. Three distinctions can be made. First, two information exchange tasks required a closed outcome, whilst the third opinion exchange did not. Second, one picture-drawing task required a one-way exchange of information, whereas a Jig-Saw task required a two-way exchange of information. Third, the picture-drawing task required an exchange of information, whereas the Jig-Saw task did not. Though the research objective was to investigate gender differences, importance differences in task dimensions were borne out.

The researchers found more NfMs occurring in the one-way information gap task. Specifically, the one-way information gap task (picture-drawing task) promotes more NfMs than the two-way information gap task (Jig-Saw tasks) and opinion exchange task (again, recall Long's 1981 results, which are contradictory). From these findings, it appears that the one-way flow of information and information gap components are the most consistent in providing opportunities to NfM.

In yet another conflicting study on task dimensions, Pica *et al.* (1993) hypothesize that a required two-way exchange of information with a single, closed outcome will provide the most opportunities for the NfM. They base their assumption on a review of previous investigations into task dimensions and their assumed role in interactional modification (see Pica 2005 for a recent account of the benefits of information gap tasks). Both NS-NNS and NNS-NNS task-based interaction studies were included in their review.

Though it should be clear now that the findings and interpretations discussed in this section are contradictory, why these studies offer conflicting results is not the primary

concern to this thesis. What is important is the fact that very little data is provided as to how task dimensions interact with the turn-by-turn moments of task-based interaction. That is, these studies fail to provide a holistic picture of task-based interaction (see Section 2.6 for studies that attempt to provide a more comprehensive picture). This is because much of the research reviewed in this section shape their interpretation of data by some preconceived notion as to why task dimensions are influential. However, whether these assumptions are correct is also not crucial to this thesis. What is important to the data analyzed in this thesis is providing specific interactional features and examples of how task dimensions interact with task-based interaction.

Furthermore, what most of the studies above do not investigate is how and why such task dimensions play an influential role in task-based interaction. Despite this lack of data, assumptions from a task-as-workplan perspective are made. Examples include, two-way information gap tasks require genuine communication (see Long 1981), or one-way information gap tasks require a focus on referential information (Gass and Varonis 1985b). What this thesis seeks to investigate is the interactional architecture and relationship of task-as-workplan and task-in-process. As mentioned throughout this chapter, reconciling these variables is at the heart of construct validity. The adopted methodology to accomplish this endeavor is CA. Section 2.6 will introduce some of the more contemporary and influential CA studies that investigate SLA and task-based interaction. Before doing so, the next section will briefly outline some of the criticisms made against NfM studies.

2.5.4 Criticisms of negotiation for meaning studies

Because many NfM studies adhere to the Input-Interaction framework, most of the criticisms put forth in Section 2.4.2 are applicable here. However, this section will raise a few more issues in regard to limitations. Firstly, although the assumptions made by the

researchers above provide a neat explanation to task dimensions, Ellis (2000, p. 200)

claims that

"One problem with this research is that it provides little information relating to how the different dimensions…interact in the impact they have on meaning negotiation. Typically, the research has compared tasks with regard to a single task dimension (e.g., the effect of a two-way as opposed to a one-way information gap). It is likely, of course, that the various dimensions interact in complex ways, with some combinations having greater influence on negotiation than others."

The previous quote underscores the problem in isolating one task-as-workplan characteristic with the NfM. Because other variables may influence task-based interaction (Section 2.2.3), attention must also be given to the different perspectives of tasks. For example, while the previous quote refers to the need to investigate multiple task-as-workplan variables and its influence on task-in-process, what is not included is how task-in-process interacts with task-as-workplan (e.g., task-takers' interpretations of task objectives).

This leads to the second criticism of NfM studies. That is, little attention is paid to the reconciliation of task perspectives (Slimani-Rolls 2005; Seedhouse 2005). What is largely not included in these studies is an account of how task-takers come to understand tasks, and how this influences task-in-process (Block 2003). As a result, the tasks investigated under these types of studies have weak construct validity. Again, the construct validity of tasks is dependent on the reconciliation of task perspectives.

Lastly, Ellis (2003: 138) has stated that "…researchers have focused on analyzing the 'text' that results from a task, giving little attention to how learners construct 'discourse' as they perform a task; with a few exceptions…the research is product oriented and has neglected process." In other words, the interactional relationship between what tasks are claimed to do, and what task-takers end up doing, is not investigated. This thesis will attempt to fill this gap by examining any interactional influence task-as-workplan may have on task-in-process. In addition, the task-takers' interpretations and negotiations of

task-as-workplan will be investigated. Specific research examples of how this has been done are discussed in the following section.

2.6 Conversation Analysis Contributions to Task-based Interaction and SLA

Although in the past ten years CA has made a considerable impact on SLA and applied linguistic studies (e.g., Firth & Wagner 1997; Seedhouse 1997, 1999b; Egbert 1998; Li 2002; Richards & Seedhouse 2005; Young & Lee 2004), the research reviewed in this final section will only consist of those that have been included in the Modern Language Journal (MLJ) special edition, *Classroom Talks* (see Magnan 2004; Markee & Kasper 2004). The objective for doing so is to provide the reader with a concise but comprehensive review of what CA, as a research methodology, can provide task-based interaction and SLA studies. An in-depth account of what CA methodology is, and how it is used to analyze the data in this thesis, can be found in Chapters 3 and 5, respectively. It is important to note that most of the contributors to this special edition are prominent researchers in both CA and SLA studies (for book length contributions, see Markee 2000; Seedhouse 2004). For this reason, the literature presented in this section represent the most cutting edge studies in applied CA to SLA research.

Recall in Section 2.5.3 that task-based interaction research informed or influenced by the Input-Interaction framework does not offer a contextual analysis. That is, the interaction occurring in tasks are isolated and quantified by some preconceived notion of what is beneficial to SLA. In addition, the task dimensions that are thought to provoke such instances of language learning are assumed to be static. That is, a task dimension, such as a two-way information gap, is thought to provide a consistent and stable form of interaction. Notwithstanding the merits of such claims, these assumptions exclude a critical element central to a CA methodology. This element is an emic perspective to data analysis (see Sections 2.2.1 and 3.3.1).

Markee and Kasper (2004, p. 493) state that the emic approach CA studies adopt provides an explication of "...meaning in terms of the local context of talk-in-interaction." In other words, CA can offer a detailed and dynamic account of task-based interaction. How this approach differs from the task-based interaction research reviewed in Section 2.5.3 is a matter of methodology.

Take Mondada and Pekarek Doehler's (2004) study, for instance, who report on a task designed to elicit specific linguistic features. However, instead of isolating specific features that may be representative of a grammatical focus (i.e., an etic approach), this study accounted for not only the interactional aspects of task-based interaction, but also institutional and sociocultural influences. What ensued was task-talk that could be seen as primarily communicative. Mondada & Pekarek Doehler's (2004, p. 510) final conclusion was that task-based interaction is variable and dynamic vis-à-vis "...not only of the cognitive dimensions of the task but also of its social meaning and the communicative situation through which the task is administered."

Mondada & Pekarek Doehler's (2004) study underscores the need to reconcile task perspectives. Take Stern's (1992) meaning before form principle, for example; he proclaims that any communicative aspect of a task will be lost if it has been devised for form (grammar) before meaning (communication). This statement assumes that predefined task characteristics are nonnegotiable, a belief that can be seen from a purely task-as-workplan perspective (i.e., etic). While tasks may have static characteristics (e.g., narratives in story telling or extended discourse in debates), such characteristics are interpreted multiple times (i.e., interpretations of tasks occur as they are conceptualized, performed, and after they are completed; see Breen 1989). That is to say, task-in-process is the result of task-takers' interpretations of task-as-workplan.

Another excellent study that complements the notion that task perspectives should be reconciled is Young and Miller (2004). In this study, four successive weekly writing conferences were videotaped for CA. The research participants consisted of a language learner and a writing instructor. The researchers discovered that as both research participants became familiar with the task and learning environment, specific interactional features evolved through mutual interpretation and understanding. For instance, the turn-taking mechanics employed by the learner gradually moved from minimal to full participation. Through the guidance of the instructor's directed questions, "...the instructor and student co-construct the student's fuller participation..." (Young and Miller 2004, p. 532). In other words, interaction is variable and dynamic, therefore difficult to isolate *a priori*.

In a similar study, Kasper (2004) investigated a dyadic interaction between a learner and native speaker of German. This study showed that the interlocutors oriented to various interactional categories, such as, acquaintances, and expert and novice. As these interactional categories shifted, so too did their discursive practices. These discursive practices appeared to follow a cyclical pattern. It was also discovered that specific interactional moves, such as repair initiations and topic closings, were dependent on these shifts in dyadic roles. Kasper (2004) is, in effect, able to identify the specific reasons why interactional moves shifted in frequency and type. It is this correlative finding that is missing in much of the task-based interaction research presented in Section 2.5.3.

As part of a larger conversation analytic investigation, He (2004) analyzed how U.S. born Chinese students studying Chinese culture organize their talk according to the activities of the classroom. It was discovered that the specific use of pronouns fluctuated according to the interactional identities chosen by the students. For instance, some Chinese students were shown to align "...themselves at various points in time with

Chinese language school, their daytime school, or their teacher, or all three" (He 2004, p. 577). This in turn shaped the collaborative efforts of the classroom. Again, findings such as these provide empirical evidence to support the notion that language learning and use occurs in a variable and dynamic context. It is concluded in this study that what CA can offer SLA research is a different interpretation of how interaction unfolds. It is not a reconceptualization of an already large and growing SLA field. This is exactly the goal of this thesis. That is, to provide a unique, and more comprehensive account of task-based interaction.

Mori (2004) also investigates how task-based interaction is aligned to the different activities that unfold in a task. In this study, the turn-taking mechanics and initiations for repair occur as the task-takers alternate between completing and managing the task. As various communicative problems (e.g., lexical or phonological) shape the type of interaction that occurred, the task-takers were shown to co-construct a mutual understanding that may not have been possible in a non-collaborative effort. However, at various times during the interaction, the task-takers appeared to be more concerned with their own language development, and employ repair initiations that may not have occurred in a less pedagogical setting. Therefore, the task-takers are shown to be shifting from one interactional orientation to another. Like all of the studies presented in this section so far, this study highlights the importance of being context sensitive. "The application of CA principles, which force analysts to present concrete, visible evidence, helps us examine the data beyond their surface manifestations and discover issues that are presented in data themselves" (Mori 2004, p. 547).

In another CA for SLA study, Markee (2004) examines how interactional transitions are manifested within the speech exchange systems of classrooms. During task-based interaction, Markee (2004, p. 584) discovered that "When teachers and learners make the

transition from one speech exchange system to another, it is quite common for problems of various kinds to occur as members adjust to the turn-taking and repair practices of the new speech exchange system." Much like Kasper's (2004) investigation, this study highlights the role CA can play in explicating the moment-by-moment, interactional context of task-based interaction. Specifically, the interaction occurring in task-based interaction unpredictably shifts from one speech exchange system to another. Markee (2004, p. 593) concludes by stating his analyses "...lend empirical support to the theoretically important position that there can be no clear-cut boundary between language acquisition and use in SLA studies that are motivated by the Interaction Hypothesis." In other words, it is difficult to isolate specific interactional features for the purpose of validating the SLA worthiness of tasks.

This section has introduced the most up-to-date CA for task-based interaction studies. The objective of this section was to highlight the different approaches and findings that exist between Input-Interaction and CA task-based research. On the one hand, there is the former research approach that predefines learning by isolating prototypical interactional moves. This type of analysis is more deductive in nature, and effective in validating tasks according to categorical principles. It does not, however, incorporate the reasons why fluctuations may occur during task-based interaction. This is because interaction is quantified, and deviant cases are therefore not taken into consideration.

On the other hand, there is the latter research approach that does not predefine learning or language use by isolating specific interactional features. This type of analysis is more inductive in nature, and effective in explicating the contextual variables that shape the moment-by-moment realities of task-based interaction. This is because CA is an emic approach that neither factors out deviant cases, nor predetermines what is or is not important to the interactants. The following section will now summarize the current

chapter. The chapter that follows is a detailed discussion of the methodological approach adopted in this thesis.

2.7 Chapter Summary

This chapter has presented the argument that the construct validity of tasks is an issue that most task-based interaction studies must acknowledge. This discussion began with task perspectives (Section 2.2.1), which was introduced to demonstrate that task-based interaction consists of two standpoints. Breen's (1987) notion of task-as-workplan and task-in-process was applied to this issue. It can be recalled that that the construct validity of tasks is simply a matter of knowing whether a task does what it is claimed do to (Section 2.2). On the one hand, a task is created with specific learning and interactional objectives (e.g., NfM). This is task-as-workplan. On the other hand, task-takers have at their disposal the opportunity to deviate from its intended objectives. This is task-in-process. Reconciling these potential differences is an issue of construct validity.

The next dependently related discussion reviewed how tasks have been claimed to produce or encourage a particular form of talk. The psycholinguistic approach to task-based interaction and its Input-Interaction offshoot, were identified as significant contributors to this type of assumption (Sections 2.4 and 2.5). In particular, task-based interaction studies informed by the Input-Interaction framework believe tasks can promote the NfM. As previously mentioned, such research relies heavily on the assumption that NfMs are conducive to SLA. This assumed correlation is traditionally tested by statistical analyses. What this thesis will do is offer an alternative account of tasks and their assumed role in the NfM. This will be done by using a conversation analytic understanding of task-talk. For this reason, this chapter concluded with a discussion of how CA has been applied to the study of tasks and SLA. The next chapter will explain the methodologies used in this thesis.

CHAPTER 3: METHODOLOGY

This chapter will begin with a discussion on ethnomethodology (Section 3.1) and how this area of study has helped formed the conversation analytic methodology employed in this thesis. The section on ethnomethodology has been broken into two sections; these sections are reflexivity (Section 3.1.1) and indexicality (Section 3.1.2). These two aspects of ethnomethodology are especially important: because (1) they provide an epistemological foundation to ethnomethodology (Heritage 1984), (2) CA is an offshoot of ethnomethodology and therefore important in the discussion of such issues (Schiffrin 1994), and (3) the characteristics of ethnomethodology establish a theoretical (epistemological and methodological) foundation for the way data are interpreted in this thesis.

The next major discussion in this chapter will review CA (Section 3.2), its data collection methods (Section 3.2.1) and methodologies (Section 3.2.2), the interactional units that will be used during data analysis (Sections 3.2.3), and the limitations of CA (Section 3.2.4). This will be followed by a short summary of the similarities between ethnomethodology and CA (Section 3.3) vis-à-vis etic and emic interpretations (Section 3.3.1). The chapter will conclude with justifications for using ethnomethodology and CA.

3.1 Ethnomethodology

Garfinkel's (2002) ethnomethodological program is concerned with how competent members of society participate and understand the world around them. The term ethnomethodology was derived from an initial investigation into how jury members' methods for accounting for each other's reasoning were applied. Hence, the word "ethno" (relating to jury people) and "method" (concerning the rationale for 'doing' something) established an empirical framework for examining people's methodology. The word ethnomethodology also underlines a basic, but salient epistemological tenet. That is, "If one assumes, as Garfinkel does, that the meaningful, patterned, and orderly character of everyday life is something that people must work constantly to achieve, then one must also assume that they have some methods for doing so" (Rawls 2002, p. 5). The 'constant achievement' that is produced out of these methods is believed to occur during the "…moment-by-moment determination of…social contexts" (Heritage 1984, p. 2). This sociological understanding is parallel to the significance CA places on the turn-by-turn realities of interaction (Section 3.2).

Out of this ethnomethodological belief comes a set of fundamental ideas; such ideas help explain how the co-construction of meaning is an autochthonous product of shared goals (Garfinkel 2002). The two ethnomethodological viewpoints that are pertinent to the present investigation are reflexivity and indexicality. These are ideas that do not necessarily represent rule governed behavior, but symbolize "…the stable organization of some set of social activities…" that are "…overwhelmingly and unrelievedly used and relied upon by participants as the basis on which further components in courses of action are initiated and developed" (Heritage 1984, p. 103). These concepts are introduced not only because they provide theoretical support for the interpretations occurring in this

thesis, but the following constructs have also shaped the methodological principles set forth by conversation analysts.

3.1.1 Reflexivity

Reflexivity is a tacit understanding of normative rules and procedures that are actively engaged in by participants (cf. the traditional methodological understanding of reflexivity is concerned with a researcher's self-consciousness). That is to say, "When we describe a situation we are, at the same time, creating it and making it occur" (Stones 1996, p. 40). As a context is being co-constructed, the procedures for making it happen are accountable and observable (ten Have 2002). Therefore, the moment-by-moment reinterpretation and reconstruction of participant understanding produces a social order that is open to investigation (Heritage 1984). In regard to task-based interaction, reflexivity is the accountable actions that move a task-as-workplan to a task-in-process. Consequently, reflexivity is germane to the issue of construct validity of tasks (see Section 2.2).

Reflexivity should be seen as a resource participants employ to establish, develop, and make accountable, the temporal understandings of any interactional episode (ten Have 2002). Furthermore, the means in which an interactional scene is created (e.g., negotiating task objectives) are the same as the reflexive procedures used to make such actions meaningful and accountable (e.g., deviating from an intended task objective). Heritage (1984, p. 110) recapitulates this in the follow passage.

"For it is precisely through the reflexive accountability of action that ordinary actors find themselves in a world of practical actions having the property that *whatever* they do will be intelligible and accountable as a sustaining of, or a development or violation, etc. of, some order of activity. This order of activity is, as Garfinkel puts it, 'incarnate' in the specific, concrete, contexted and sequential details of actors' actions. It is via the reflexive properties of actions that the participants – regardless of their degree of 'insight' into the matter – find themselves in a world whose characteristics they are visibly and describably engaged in producing and reproducing. It is through these same properties that the actors' actions, to adapt Merleau-Ponty's phrase, are condemned to be meaningful."

Reflexivity, as characterized in the previous quote, explains how an interactional scene is a reflexive product of participants' accountable actions (e.g., reinterpretation of task-as-workplan). That is to say, "…knowledge and action are deeply linked and mutually constitutive" (Schiffrin 1994, p. 233). This underscores the importance of reconciling task perspectives. Recall that Breen (1987) states that task-in-process will often deviate from task-as-workplan (Section 2.2.1). However, he does not provide any examples to demonstrate this deviation. Therefore, the following extracts will demonstrate how 'knowledge and action are deeply linked' by showing how the deviations between task-as-workplan and task-in-process are accountable and observable.

Before analyzing the following extracts, a short introduction to the structure of Task 4 is in order. This task required one member of a conversation dyad to explain a route on a map to her fellow interlocutor. Although both task-takers were given a similar map (some of the landmarks on the maps were slightly different; e.g., one airplane versus two airplanes), only one task-taker possessed the route (specific details regarding Task 4 are provided in Section 4.3.4). Transcription conventions can be found in Appendix A, though a few clarifications at this point would be prudent. First, the numbers within parenthesis represent pauses in seconds. Second, punctuation marks denote voice quality, and not discourse markers (see Hutchby & Wooffitt 1998). Last, brackets symbolize overlapping or contiguous talk.

Extract 1: Dyad 6 – Task 4

1 S1: so youre going to tell me what to do↑ (0.3)
2 S2: ((inaudible)) you have to draw a map (1.1) but I have (0.2) I have a route (0.3)
3 here (0.2) and I tell you (0.3) about my route (0.3) right? (1.1)
4 S1: <yea[h<]
5 S2: [and] then you (.) you draw that (0.4) on your map (0.3) and then you will
6 me (0.5) because I think the two maps ah, different (1.4)
7 S1:°mm°=
8 S2: =lets try it out and then you will see if we are, (.) if we have the same map
9 S1: okay

In Extract 1, both task-takers have read the task directions and are negotiating their understanding of them. This is evident by the talk that is produced in lines 2-8 (N.B. CA traditionally relies solely on the talk that is produced in transcripts and recordings; see below). In line 2, S2 has determined that she has the map route, and must consequently describe the missing information to S1. Further task negotiation occurs during lines 5-7, where S1 is informed that after S2 has explained her route ("and then you you draw that on your map"), S1 must reciprocate the route-giving responsibility ("and then you will me because I think the two maps ah, different"). The term route-giving is used because it represents precisely what this task-taker is supposed to do. Though there are many ways in which task-takers can provide route descriptions, some of which may be culturally or individually related, none seem to transcend the fact that one task-taker possess the route whilst the other one does not. That is, all of the task-takers studied in this thesis who possess the route do in fact describe what is missing on their partners' task. Before discussing the interactional product of this series of turns, the interaction occurring in Extract 2 will be briefly introduced.

Extract 2: Dyad 2 – Task 4

1 S1: [you] have the route you have the route (1.3)
2 S2: yeah I have the route (0.2) but
3 S1: but I dont have (0.6)
4 S2: oh: you dont have so I tell you to=
5 S1: =the route (0.2) h[ow to dr]aw a picture you know (.) right to start (0.4)
6 S2: [ah↑]
7 S2: from (0.9) start to (0.5) … ((task continues)) …

The negotiation of task directions in Extract 2 begins in a similar fashion; in lines 1-4, both task-takers have determined who is in possession of the missing route. However, both task-takers then determine that only S2 is responsible for the task-giving assignment (lines 4-6), and therefore interpret the task directions differently than the previous dyad (i.e., only one route giving responsibility is established).

Extracts 1 and 2 illustrate the initial stage of developing an understanding of task objectives. Both interactional scenes are accountable to the task-takers' reflexive practice of task negotiation and interpretation (see Duff 1993, and Coughlan & Duff 1994 for similar findings). For example, the additional time it took Dyad 6 in Extract 1 to complete Task 4 is reflexively linked to the reciprocation of the route-giving responsibility. On the other hand, Dyad 2 in Extract 2 did not reciprocate the route-giving responsibility, thereby reducing the amount of time needed to complete Task 4. In other words, knowledge of the route-giving responsibility and the subsequent action of completing the task is 'deeply linked and mutually constitutive'. In the interest of space, only a crude example will be used to demonstrate the reflexive nature of task interpretations. Specifically, Dyad 6 took 196 lines of transcript to complete Task 4, whereas Dyad 2 only needed 89 lines of transcript.

However, the quantitative difference is of little relevance to this discussion. The more salient issue at hand is the reflexive link between task-as-workplan and task-in-process. The reflexive link is represented by the fact that task-takers are constantly negotiating and updating their understanding of task-as-workplan, which in turn produces a context that is self-renewing (i.e., because task-in-process is reflexively linked to task-as-workplan, it is a self-renewing process). That is to say, task-takers' knowledge of their task objective is reflexively manifested in task-in-process as accountable and observable practice. In this case, a numerical value was given as an accountable and observable example (again, the quantitative difference displays, somewhat simplistically, that the task-takers' interaction is a progression of joint understanding and shared procedures). In conclusion, reflexivity refers to the sense making procedures used to make such actions accountable. Reflexivity in relation to task perspectives is the notion that task-as-workplan is a 'knowledge' that is linked to the 'action' of task-takers.

3.1.2 Indexicality

The notion of indexicality is a central characteristic in both ethnomethodology and CA. Indexicality is the idea that the meaning of talk is embedded in the context in which it is used. Examples include words such as 'here', 'there', 'this', or 'that', just to name a few (N.B. though these examples are analogous to individual units of deixis, indexicality also possesses more underlying, sociological principles, which are discussed below). In task-based interaction, indexical expressions are generally referents of tasks, or task-as-workplans. In both institutional (educational) and social settings, indexical expressions act as efficient and effective communicative devices. For example, instead of repeating previously established facts, indexical expressions allow interlocutors to replace mutually established context with 'shortcut statements'. In effect, "...on all occasions, all expressions (and actions) are in fact indexical" (ten Have 2004, p. 21).

However, for ethnomethodologists (and conversation analysts), indexicality is more than just an epistemological understanding; it is a move away from the analytic process of substituting theoretical assumptions and predefined categories for the local context. This issue is a central tension between researchers working within a conversation analytical framework on the one hand, and a more general discourse analysis approach on the other (see Section 2.4.2). For instance, by taking a predominately quantitative approach to interaction, as most task-based interaction research informed by the Input-Interaction framework do, "...the production of frequency counts of types of acts...sacrifice the understanding of locally situated meanings" (Psathas 1995, p. 8). Indexicality, or 'locally situated meanings', is of course a central epistemological and methodological concern for ethnomethodologists and conversation analysts.

The matter is further complicated when task perspectives, or the notions of task-as-workplan and task-in-process, are taken into consideration (see Seedhouse 1999a for a

study that highlights the importance of indexical expressions; in his analysis, tasks may result in similar outcomes, but the talk that occurs within them may deviate). For example, although a task-as-workplan may stress the importance of task outcomes (see Section 2.5.3), the subsequent and successful completion of such an outcome may result in a less than ideal task-in-process. Take the following extracts as examples (both extracts are taken from the corpus of this thesis). In the two extracts, both dyads reach a common task outcome (i.e., navigating through a map), yet the means in which they complete the task differ.

Extract 3: Dyad 4 – Task 4

1 S2: car (0.8)
2 S1: a small car (1.1)
3 S2: yeah (0.2) next one=
4 S1: =and the tree (0.7)
5 S2: tree (0.3) next one
6 S1: snowman (1.1)
7 S2: what? (1.2)
8 S1: snowman (0.6)
9 S2: snowman (0.6) next o[ne]
10 S1: [and] then ball (1.6)

In Extract 3, S1 is the information holder, and S2 is the information receiver. The indexical nature of this interaction is represented by the way both task-takers rely on recycled communicative exchanges to complete Task 4. While S1 provides the map route according to landmarks (e.g., 'tree' and 'snowman'), S2 treats the transmission of information as a checklist. This is reflexively manifested in the speed (e.g., 'tree') and efficiency (e.g., 'next one') in which this task is completed. It can also be said that the interaction occurring in Extract 3 is part and parcel of a 'path of least resistance' approach to task-based interaction (Seedhouse 1999a). The opposite can be seen in Extract 4.

Extract 4: Dyad 5 – Task 4

1 S2: at the (0.9) and then you turn (0.7) left>
2 S1: turn left (0.7)
3 S2: turn left and then the line will be (0.5) u:::m: (0.2) facing the car (.) right
4 S1: okay yeah yeah=
5 S2: =yeah (0.5) so that you draw line (0.4)

6 S1: mm hm (0.4) to the car? (1.1)
7 S2: to the car but (0.5) bu::t (1.2) m:: draw the line (0.9)
8 S1: under the car,: (0.7)
9 S2: when you (0.3) when you come to: the: (0.4) head of the: car you'll (0.2)
10 turn the line again (0.5) to the up

In Extract 4, these task-takers take approximately the same number of interactional turns to negotiate just one landmark (the dyads in the previous extract negotiate 3 landmarks). The information holder is S2, and the information receiver is S1. The indexical nature of this interaction can be seen in the way both task-takers negotiate the map according to the route (cf. Extract 3 and landmarks). This is reflexively manifested in the detail and directions exchanged between both task-takers. For example, in lines 3 and 9, S2 positions S1 according to the following commands: 'left', 'facing', 'come to', 'head of the car', and 'turn…up'. In lines 6 and 8, S1 orients his questions according to such directions (i.e., 'to the car' and 'under the car').

Although several pedagogical issues exist in Extract 3 and 4 (e.g., impoverished talk and language development), the rationale for illustrating these examples is to demonstrate the locally situated nature of talk (i.e., indexicality). Despite the fact that both dyads are completing the same task in the same setting, the communicative nature of their talk extends beyond traditional views of local context (e.g., tasks and institutional setting). This extension into the micro moments of interaction ends with task-takers. As Extracts 3 and 4 have shown, indexicality is a manifestation of task-takers' situated meanings of their local context (task-in-process), and not the situation of the local context over task-takers (task-as-workplan). In regard to this thesis, accounting for the interactional variation in Extracts 3 and 4, or the reconciliation of task perspectives, is partly an issue of indexicality (e.g., task-takers' interpretations and negotiations). In the examples given, one task-as-workplan led to two forms of task-in-process. This deviation occurred because Dyad 4 in Extract 3 emphasized landmarks, while Dyad 5 in Extract 4 chose to

negotiate the route. It can be said, therefore, that the uniqueness of talk, or indexicality, is reflexively tied to task-takers' joint understanding of task-as-workplan.

3.2 Conversation Analysis

Conversation analysis, or CA, is the methodological practice of analyzing conversation. Because the word conversation may denote a rather specific analytical focus, the term talk-in-interaction is traditionally used to account for a wider range of interactional episodes (e.g., interviews, speeches, storytelling, classroom talk). Like ethnomethodology, CA subscribes to notions of reflexivity and indexicality. That is to say, CA believes that the local and meaningful practice of social actions (i.e., talk-in-interaction) produces an analyzable order (Prevignano & Thibault 2003). The primary aim of CA is to uncover this organization of social order (Sacks, Schegloff, & Jefferson 1974). Accordingly, as with ethnomethodology, CA studies the methodology of 'doing' interaction (Hutchby & Wooffitt 1998). More specifically, CA is designed to inspect the interactional structure of talk-in-interaction. The analytical framework for examining interactional structures is underpinned by several theoretical principles. Psathas (1995) identifies seven basic CA assumptions; only the first four assumptions will be given, as they are directly relevant to the previous discussion of reflexivity and indexicality.

1. Order is a produced orderliness.
2. Order is produced by the parties in situ…
3. The parties orient to that order themselves…
4. Order is repeated and recurrent.

(Psathas.1995, pp. 2-3)

A term that captures all four 'orders', and is frequently used in CA literature, is *in situ*. That is, the repeated and recurrent orderliness that is produced and oriented to by participants occurs *in situ*. Other terms that have been used in lieu of *in situ* are

indigenous, autochthonous, or local, just to name a few. While these terms may be taken as extraneous jargon, they are significant to CA because they all stress the importance of the local (indexicality) and order (reflexivity) talk-in-interaction is believed to produce. Consequently, assumptions 1-4, and therefore notions of reflexivity and indexicality, represent the epistemological tenets of CA.

From a more methodological standpoint, "Most practitioners of CA tend to refrain, in their research reports, from extensive theoretical and methodological discussion" (ten Have 1990, p. 1). Though CA refrains from predefined categories or concerns (Psathas 1995; Markee 2000), it is driven by the assumption that all references to data must be taken from a participant perspective (Markee & Kasper 2004; see Section 3.3.1). Again, this assumption is underpinned by the idea that talk-in-interaction is methodically organized with a self-governing context from which 'deeply ordered' talk manifests (Hutchby & Wooffitt 1998; Schegloff 1988; Schegloff, Koshik, Jacoby, & Olsher 2002). This assumption is put into practice by highlighting how interactional resources are sequentially ordered and universally employed. As a result, analytical units that signify sequence and inference are central to CA methodology.

Sequential units include turns and turn-taking, adjacency pairs, and transition-relevance places, whilst inferential properties are shown to exist by demonstrating properties of preference, repair, and overlapping talk, just to name a few. Before detailing the significance of these properties to the present investigation, a brief discussion on what constitutes appropriate CA data will precede.

3.2.1 CA data collection method

The general policy for collecting CA data starts with the compilation of audio and video recordings of naturally occurring data (Seedhouse 2004). In recent years, videotapes have become the preferred means of data collection because embodied actions

can be studied in conjunction with talk (e.g., Szymanski 2003). However, the presence of any recording equipment, including audio recorders, must be seen as a barrier to the 'naturalness' of data (Ochs 1979).

While collecting data, most practitioners of CA avoid experimental designs, preformulated categories and hypotheses, and scripted text. Such methodological practices de-emphasize participants' roles and local context (cf. reflexivity and indexicality), as well as reduce phenomena to a specific set of observables (Schegloff 1993). Other CA practitioners may stress the importance of 'unmotivated looking' (Psathas 1995), though it is hard to imagine the absence of some theoretical and methodological motivation in any research endeavor.

Once data have been collected, transcripts are developed according to the conventions set forth by Gail Jefferson (see Atkinson and Heritage 1984 and Appendix A). CA transcription work is a laborious task because it aims to include all recorded sounds and interactional practice, never dismissing, *a priori*, any interactional features as insignificant (see Markee 2000, and Green and Dixon 2002, who discuss CA in relation to other discourse analysis approaches). This approach demonstrates CA's adherence to the details of talk (cf. critical discourse analysis; see Korobov 2001), which also underscores the belief that talk-in-interaction is reflexive and indexical (e.g., Schegloff 1997). Therefore, it can be said that the methodology of CA transcription work is tied to the epistemological tenets of ethnomethodology. Put in another way, CA, as an approach to discourse, considers text and context as mutually constitutive. Because "…CA transcripts of talk pay little attention to social relations and to what other approaches call *social context* [italics added]…CA reflects yet again the ethnomethodological avoidance of premature generalizations and idealizations" (Schiffrin 1994, p. 235).

Despite the importance of CA transcripts, "In all cases, the recordings are considered to be the definitive source of information about the behaviors that were observed. Transcripts are understood as a tool for analysis to be used in conjunction with recordings" (Markee 2003, p. 2). The secondary role transcripts play in a conversation analytic methodology raises another important issue. Transcripts are researchers' extension of data, and may or may not accurately represent the phenomena under investigation (Ochs 1979). It is for this reason that such detail is incorporated in CA transcripts.

Finally, other sources of data, such as interviews, questionnaires, observations, or diaries, are not generally used as supplementary resources (Heritage 1984). From a pure CA perspective, such accounts go against an ethnomethodological understanding of reflexivity and indexicality (Markee 2000). Recall that the orderliness of talk-in-interaction is believed to be something that occurs *in situ*. From a methodological standpoint, participants' accounts may not always correspond to their previous conduct (ten Have 1999). This poses the problem of reconciling different accounts (i.e., participants' reconstruction versus participants' reinterpretation), and again, de-emphasizes the significance of the local production of meaning (Psathas 1995). As a result, the rigorous attention paid to recordings and transcripts are defining features of CA data collection methods. Now that the methods for CA data collection have been introduced, the specific means in which CA data are analyzed will be discussed.

3.2.2 CA data analysis methodologies

"What CA offers is an ability to elucidate the procedural bases of (inter)actions, in the sense that generalized 'organizations' and 'devices' can be used to analyse a field of local possibilities for action, depending on what happened before and various contextual particulars, and thereby to provide for the sense of the actions under consideration" (ten

Have 1999, p. 24). It is the purpose of this section to describe these 'organizations and devices' of 'action'.

A central element of a conversation analytic methodology is the belief that talk-in-interaction takes place in a highly inferential environment (Seedhouse 2004). Turn-by-turn, utterances form a sequence from which inferences can be made according to their organization. CA uses the term 'next-turn proof procedure' to capture this inferential and sequential environment (Hutchby & Wooffitt 1998). Next-turn proof procedure is a device used by interlocutors to position their 'next' turn or utterance according to an understanding created in a 'prior' turn or utterance. The following example extract illustrates.

Example Extract 7: Next-turn proof procedure
Fern: Well they're not comin',
Lana: Who.
Fern: Uh Pam, unless they c'n find somebody
(Sacks *et al.* 1974, p. 702)

Whether or not a next turn or utterance is what the prior speaker had anticipated is a sequential matter. For example, in the extract above Lana's nonunderstanding of who is not coming is symbolized by the question that follows Fern's initial statement. Schiffrin (1994, p. 237) discusses next-turn procedure in relation to intersubjectivity.

"From a speaker's point of view, next-position thus offers a location in which to find the recipient's analysis of the utterance – to see whether an anticipated response is confirmed. From a recipient's point of view, next-position offers an opportunity to reveal aspects of the understanding of prior talk to which own talk will be addressed…Thus, next-position is a crucial location for the building of intersubjectivity."

Such a pairwise description of talk-in-interaction demonstrates an organization that is accountable by participants and analyzable by researchers. This organization is called an adjacency pair. A pair of utterances, such as an invitation and a response, is a basic example of an adjacency pair (though it is important to stress that not all turn pairs are a

matter of adjacency pairs; see Sacks *et al.* 1974). The extract below provides two examples of what question-answer adjacency pairs look like.

Example Extract 8: Adjacency pair – question and answer
Desk: What is your last name [Loraine.
Caller: [Dinnis.
Desk: What?
Caller: Dinnis.

(Sacks *et al.* 1974, p. 702)

This captures two primary concerns for conversation analysts. That is, adjacency pairs demonstrate 'the sequential order of talk-in-interaction' (i.e., turns), which in turn reveals its 'normative and inferential properties' (e.g., next-turn proof procedure; see Hutchby & Wooffitt 1998). For instance, a response to an invitation may contain several possible responses (e.g., acceptances, declinations, postponements). The way in which participants sequence their turns to this matter demonstrates their normative and inferential framework (see ten Have 1999, Hutchby and Wooffitt 1998, Schiffrin 1994, or Psathas 1995, for examples of extracts on this issue). Therefore, it is the job of conversation analysts to reveal the normative properties of talk-in-interaction, by identifying its sequential consequence. The basic units of analysis for a conversation analytic methodology can then be seen as the turn and adjacency pair. Adjacency pairs are thought to contain eight fundamental properties.

1. They are (at least) two turns in length.
2. They have (at least) two parts.
3. The first pair part is produced by one speaker
4. The second pair part is produced by another speaker.
5. The sequences are in immediate next turns.
6. The two parts are *relatively ordered* in that the first belongs to the class of first pair parts, and the second to the class of second pair parts.

7. The two are *discriminately related* in that the pair type of which the first is a member is relevant to the selection among second pair parts.
8. The two parts are in a relation of *conditional relevance* such that the first sets up what may occur as a second, and the second depends on what has occurred as a first.

(Psathas 1995, p. 18)

To summarize the significance of the adjacency pair, the self-explicating nature of talk-in-interaction is dependent on the joint interpretation of prior and next utterances. While the interpretative mechanics of mutual understanding will no doubt lead to a number of alternative utterances (Stubbe *et al.* 2003), it is the objective of conversation analysts to unravel the interpretive procedures utilized by participants (cf. theorized by researchers; see Section 3.3.1). CA's indifference to *a priori* theoretical formulation on the one hand, and attention to reflexivity and indexicality on the other, are fundamental methodological justifications for investigating the sequential relevancies of talk-in-interaction (Seedhouse 2004). That is, CA calls for talk-in-interaction to be analyzed within the local and sequential context in which it occurs.

Although CA offers numerous ways to analyze the turn-taking mechanics of talk-in-interaction (e.g., overlapping talk, pauses, turn construction units; see ten Have 1999 or Schiffrin 1994), this thesis has established a rather specific research agenda (see Chapter 2). That is, in conjunction with the construct validity of tasks, it is the issue of the NfM that is the focal point of analysis. For this reason, only the conversation analytic tools that will be used in this thesis will be included for review. For the construct validity of tasks, an ethnomethodological understanding of reflexivity and indexicality will help examine task perspectives (N.B. reflexivity and indexicality have been discussed in Section 3.1). After applying the principles of reflexivity and indexicality to the issue of

construct validity, any noteworthy interactional themes that are borne out will be accounted for by using CA. Consequently, some CA concepts may be briefly introduced during the analysis of data in Chapter 5. In fact, it is quite common for ethnomethodological and CA studies to incorporate literature and methodology as data are being introduced (Garkfinkel 2002). For the NfM, a conversation analytic understanding of repair will be used to demonstrate the ways in which task-takers co-construct task-in-process.

In Sections 2.4 and 2.5, the literature described how the NfM has been conceptualized and investigated in the Input-Interaction framework. It can also be recalled that a working definition of the NfM was not established; this is because the Input-Interaction understanding of the NfM is subsumed by the more interactionally encompassing CA notion of repair. What will follow and conclude this discussion on methodologies is a detailed discussion of repair.

3.2.3 Repair

Repair is an interactional device used to overcome some communicative difficulty, such as referential problems (e.g., task features), slips of the tongue, or unintelligible speech (e.g., ungrammatical talk). The definition just given describes a basic one-to-one correspondence. That is, if an utterance contains some type of communicative difficulty, then there is an opportunity for repair. This relationship fits within the adjacency pair framework; consequently, repairs "...provide for the routine display of participants' understandings...thereby building in a routine grounding for intersubjectivity" (Schegloff 1992a, p. 1295). However, repair should not be confused with correction. The latter is concerned with supplying an alternative to an error, whereas the former is an umbrella term for overcoming all communicative trouble (van Lier 1988). Because this thesis is using a conversation analytic understanding of repair to investigate the NfM, the more

interactionally encompassing term repair will be used. Any noteworthy instances of correction occurring in the current corpus will be highlighted and differentiated. This is in line with Seedhouse's (1999b; 2004; 2005) call for investigating repair according to the context in which it occurs. The different repair resources and organization discussed in this section will demonstrate why a conversation analytic understanding of repair is a more interactionally encompassing term than correction or the NfM.

A conversation analytic understanding of repair is concerned with two variables (Schegloff, Jefferson, & Sacks 1977). The first variable is the interactants. This variable can be broken down to the initiator (i.e., the person highlighting the communicative trouble, but not necessarily the person producing the trouble), and the repairer (i.e., the person repairing the communicative trouble). As a result, the first variable provides four possible alternatives. Some researchers may include two more possibilities to the following list (i.e., self-initiated repair-failure and other-initiated repair-failure), but because this thesis is not concerned with the success of repairs, repair-failures will not be included (see Hauser 2003).

1. self-initiated self-repair (speaker initiates and repairs trouble)
2. self-initiated other-repair (speaker initiates trouble, but other repairs it)
3. other-initiated self-repair (other initiates trouble, but speaker repairs it)
4. other-initiated other-repair (other initiates and repairs trouble)

The second variable is repair position. This variable deals specifically with where the repair is in relation to the source of the trouble. Repair position also leads to four possible alternatives.

1. Repair occurs during the trouble source turn
2. Repair occurs during the transition of the trouble source turn
3. Repair occurs during the next turn

4. Repair occurs during the third or fourth turn

Repairs occurring in alternatives one and two lead to self-initiated self-repairs, whilst alternatives three and four lead to other-initiated other- and self-repairs, respectively). Transitions, as noted in alternative two, relate to the moment where another speaker has the opportunity to take a turn (e.g., long pause or completion of a thought), but the current speaker reestablishes the floor.

Now that the types and positions of repairs have been established, it is important to discuss how the organization of repairs is related to preference. Schegloff *et al.* (1977) note that the occurrence of repairs in relation to their type and position demonstrates an order of preference (not to be confused with individuals' psychological predispositions, though it can be argued that any overwhelming interactional trend may in fact be a result of psychological preference; see Boyle 2000). Between the four possible repair types, self-initiated self-repair is said to be considerably more common than other-initiated other-repair. This preponderance of self-initiated self-repair over other-initiated other-repair has led to the conclusion that there is an overwhelming interactional preference for self-initiated self-repair (see Seedhouse 1999b and 2004 for a different conclusion on other-initiated repairs in classroom contexts). In casual conversations, the preference for self-initiated self-repair is said to be a face-saving mechanism, while second language contexts may require other-repair for linguistic or learning objectives (van Lier 1988). This variability is thought to be systematic (Day *et al.* 1984; Seedhouse 1999b; van Lier 1988; Schegloff *et al.* 1977). The means in which repairs are conducted, however, vary according to the people that use them. Specific examples of the type of repairs that are applicable to this thesis are given below.

Although the number of utterances that can be used to initiate repair is too great to document, they can be classified into two broad categories. These categories are directed

repair initiators and undirected repair initiators. The former repair initiator identifies the communicative difficulty, whereas the latter repair initiator does not indicate the communicative problem (see Drew 1997 for a similar mode of analysis). Extract 5 gives an example of a directed repair initiator. In this extract, the task-takers are describing and drawing a picture.

Extract 5: Dyad 1 – Task 3a

```
1  S1:   [an]: inside ofda o[val  ]
2  S2:                          [oval] (0.2) ov[al    ] (.) whats oval (0.9)
3  S1:                                         [there]
```

In line 1, S1 is describing an object inside of an oval. Just as this statement is completely hearable, S2 simultaneously initiates a repair by repeating the trouble source ("oval"). After a short noticeable pause, "oval" is repeated and followed by another repair initiator ("whats oval"). Thus, a directed repair initiator is employed three times in line 2. Again, these repair initiators are directed because they specifically indicate the trouble source. Extract 6 shows what an undirected repair initiator may look like. In this extract, both task-takers are also describing and drawing a picture.

Extract 6: Dyad 6 – Task 3a

```
1  S1: =okay uh:m (4.7) uhm there seems to be: (3.2) uh:: toilet (0.2) i.hh.n in th.h.e
2        middle (0.4)
3  S2: what?
```

In line 1, S1 begins the picture drawing task by describing a toilet. Two lines later in line 3, S2 produces an undirected repair initiator ("what?"). This initiator is undirected because it does not precisely tell S1 where the trouble source is. It was later revealed in the transcripts that S2 needed confirmation of the word "toilet."

Differentiating between directed and undirected repair initiators is important because the success of the ongoing interactive work is partly related to resources participants use to achieve intersubjectivity (Schegloff 1992a). However, two more categories of repair can be identified as influencing the type of intersubjectivity achieved; they are exposed

and embedded correction. Jefferson (1987) states that the former repair is said to stop the flow of communication (i.e., the trouble source becomes the interactional focus), whereas the latter repair is said to occur with the flow of communication (i.e., the trouble source is embedded in the interaction). Extracts 7 and 8 demonstrate what an exposed correction and embedded correction may look like, respectively.

Extract 7: Dyad 1 – Task 3a

1 S1: =inside the square there is oval (1.1)
2 S2: °h[m°]
3 S1: [you] know what. e- (0.3) what oval is (1.1)
4 S2: O,
5 S1: o:::val
6 S2: ova (0.5) o[va]
7 S1: [o::]:val (0.4)

The task-takers in Extract 7 are completing a picture-drawing task. In the beginning of Extract 7, S1 is describing a square with an oval inside of it. The low-pitched response in line 2 can be seen has initiating the subsequent repair sequence (lines 3 – 7). In this case, the flow of communication (describing an object) is momentarily put on hold to clarify what an oval is. The repairs in lines 5 and 7 are therefore an exposed correction.

Extract 8: Dyad 2 – Task 4

1 S1: is it go underneath the feetch or or it goes a- above the feetch (0.6) above the
2 feetch (0.4) or: (.) underneath the feetch (0.4)
3 S2: underneath the fish (0.4)
4 S1: fis[h]
5 S2: [an]d then on the

The task-takers in Extract 8 are carrying out a map navigation task. In lines 1 and 2, S1 is navigating S2 through a sequence of landmarks. The trouble source is the way S1 pronounces fish ("feetch"). The other-initiated other-repair in line 3 ("underneath the fish") both confirms the previous information and corrects the mispronunciation. The interactional work of navigating through the map continues without interruptions (lines 4 and 5). Therefore, the repair in line 3 can be seen as an embedded correction.

The previous discussions on repair (e.g., sequence, preference, directed repair initiator, embedded correction) are specific examples of how talk-in-interaction is a dynamic and sequential enterprise. What is also relevant to this thesis, and to the investigation of the NfM, is the type of trouble being repaired. For second language classrooms, three broad categories of repair have been identified. Although this thesis does not specifically investigate classroom task-based interaction, the second language users/learners that make up this corpus employ repairs for the same type of troubles.

> 1. Medium-oriented: a focus on the forms and/or functions of the target language
> 2. Message-oriented: a focus on the transmission of thoughts, information, feelings, etc.
> 3. Activity-oriented: a focus on the organization and structure of the classroom environment, rules for the conduct of activities, etc.

(van Lier 1988, pp. 187-188)

As illustrated in the above list, repairs are used to overcome problems in language, message, and activity. These distinctions are especially important to the study of the NfM. As noted in Chapter 2, the NfM is thought to promote SLA. As a result, many task-based interaction studies have quantified occurrences of repair, but have done so without differentiating between repair types (see Section 2.5). While quantification is not an unfavorable mode of analysis, its effectiveness becomes weakened when the discrimination between constructs is disregarded. In other words, each repair that has been included in this section serves a specific interactional function (e.g., undirected repair initiator versus embedded correction). Interactional dynamics vary according to the type of resources employed (e.g., Extracts 7 and 8). These resources have been introduced because attention has been paid to the organization of talk-in-interaction.

One can easily see how the sequential analysis of CA can be particularly conducive to the study of repair. It is precisely the normative and inferential framework interlocutors use to achieve intersubjectivity (e.g., repairs) that is subsequently borne out in the sequential environment of talk-in-interaction (Sacks *et al.* 1974). Hauser (2003, p. 90) frames this thought around a conversation analytic understanding of repair:

"Like any other kind of action that occurs within interaction, such things as trouble source turns, self- and other- initiation [sic], and self- and other-repair are embedded within and must be analyzed within the local sequential context in which they occur. Work in CA has demonstrated that...each [are] embedded in a particular sequential context which both shapes the repair turn and is itself shaped by the repair turn."

The connection between ethnomethodology's epistemological understanding of reflexivity and indexicality on the one hand, and CA's methodological focus on the local sequential context on the other, should now be clear. This thesis is applying these concepts to an investigation that has been traditionally conducted without such an emphasis (see Section 2.5). Nevertheless, applying a conversation analytic understanding of repair to the study of the NfM should not be seen as a riposte to the Input-Interaction framework. On the contrary, the goal is to simply provide a clearer, broader picture of task-based interaction. Because CA emphasizes, rather rigorously, the local sequential context of talk-in-interaction, it is important to discuss the limitations of such a focus.

3.2.4 CA limitations

Throughout this chapter there has been an emphasis on the local order and inferential and normative properties of talk-in-interaction. CA analyzes these properties by collecting audio or video recordings. These assumptions lead to several paradoxical situations. First, although CA relies on both transcripts and recordings, it is often the transcripts that are used for presentation and publication. For this reason, issues such as gestures or physical space may also need to be included in transcriptions (see Lazaraton 2004 for an example of how this can be done). It can also be recalled that CA calls for

the collection of naturally occurring data, and to subsequently analyze them from a participant perspective. However, CA:

"...recordings are not the same as the social interaction...They are selective. Much went on before they started and after they stopped. Furthermore, what is 'picked up' or 'in shot' is only part of a much wider realm of happenings...Moreover, we do not relate to recordings in the same way that we orient to social interaction when we are participants in it. In analysing recordings, we listen or watch as spectators (or, at most, in vicarious participation). This is heightened by the fact that we can slow down the recording, stop and replay it" (Hammersley 2003, p. 759).

Second, CA's focus on the mundane occurrence and organizational properties of talk-in-interaction raises the question of what value CA is to a broader audience. For instance, is a 'turn' or 'adjacency pair' a viable construct for SLA researchers (Markee 2000)? Furthermore, He (2004, p. 578) states conversation analysts do not "...know what features of interaction are important to a grounded account of L2 acquisition, nor which aspects of L2 acquisition are affected by interaction." She (ibid., p. 578) goes on to conclude that "We may only deduce from CA studies of classroom interaction what may constitute optimal or conducive learning environments. CA is not concerned with the cognitive processes that enable the learner to absorb the interactional data internally; nor does CA address the process of learning over an extended period of time."

In regard to SLA studies, this leads to the third and fourth limitation of CA. That is, CA is a behavioral discipline that neither concerns itself with the unobservable, nor with documentation methods. As Markee (2004, pp. 496-497) has said, "...CA is a behavioral discipline than cannot provide us with access to participants' internal mental states." In regard to the unobservable, it is well documented that language learning involves more than just the observable (e.g., Oxford *et al.* 2004; de Guerrero 1994; Ellis 1995). For example, de Guerrero (1994) adopts a sociocultural approach to investigate the language learning characteristics of inner speech. In this case, relying solely on spoken transcripts would clearly restrict the language learning generalizations made in relation to inner

speech. Gass (2004) believes documentation of learning (e.g., investigating acquisition using pre- and post-tests) must take place in order for any study to know what is a conducive learning environment.

Furthermore, documentation methods, such as interviews, questionnaires, or grammatical tests, are discounted by conversation analysts as context-free data. Recall that a conversation analytic understanding of context is grounded in the local sequential environment of talk-in-interaction. This obviously limits CA from making any substantial language learning claims. Consequently, some may say CA is not suitable for investigating language acquisition, but rather its language use (Markee 2000; N.B. some would claim language use equates to language development; see Hatch 1983 for a seminal example). The issue of language use and language acquisition leads to the final limitation.

That is, CA does not possess any theories of language learning (N.B. this issue is highly contentious because acquisition can be demonstrated through the competence of interlocutors engaged in talk-in-interaction; furthermore, cognition can also be socially distributed and manifested in extracts of talk-in-interaction). Markee (2000) and others (e.g., He 2004) have attempted to reconcile this limitation by documenting short-term learning occurrences, or interaction that could be seen as particularly conducive to language learning. The problem with short-term learning and conducive learning environments is that they are not substantial evidence of language learning (Larsen-Freeman 2004). Yet, Markee (2000) and He (2004) can be seen as applying 'pure' CA. That is to say, they do not compromise the epistemological and methodological tenets of ethnomethodology and CA. Mondada and Pekarek Doehler (2004) do, however, compromise between epistemological perspectives. In their study, they apply a sociocultural understanding of language learning to a conversation analytic account of

classroom interaction. They make it very clear from the outset of their study that they are centrally concerned with language learning. The end result was a fine-grained analysis of talk-in-interaction grounded in a theory of language learning. Hall (2004, p. 611) believes this type of study "...highlights the developmental significance of social interaction."

Therefore, understanding the epistemological boundaries of CA will in turn lead to a better appreciation of its limitations. By recognizing the aforementioned limitations (N.B. the issue of CA and language learning is highly controversial), this thesis is establishing its methodological boundaries. For instance, though this thesis is not concerned with task-based language learning (cf. task-based interaction), the framework in which this thesis was created should be seen as applied CA (cf. pure CA; e.g., Schegloff 1988). In other words, this thesis is more inline with Mondada and Pekarek Doehler's (2004) investigation in that both studies have an empirical objective outside a traditional conversation analytic approach. Whereas the former investigation is centrally concerned with language learning, and as a result must apply a theory of language learning, this thesis is centrally concerned with the construct validity of tasks and the NfM. Consequently, this thesis does not need to apply a theory of language learning, but will focus on the sequential, normative, and inferential properties of task-based interaction.

Although the sections above discussed in detail the organization of talk-in-interaction, the following sections will highlight an important concept that both ethnomethodology and CA share. This concept is treated as a separate topic because it provides a very tangible way of differentiating between what ethnomethodology and CA can offer on the one hand, and various approaches to discourse analysis on the other. Furthermore, the interpretations and discussions throughout this thesis are underpinned by this concept.

3.3 Ethnomethodology and Conversation Analysis

The issue of whether ethnomethodology and CA are similar is a controversial one (Clayman & Maynard 1995). Although the collaboration between Harold Garfinkel and Harvey Sacks (the founders of ethnomethodology and CA, respectively) is well documented (e.g., Garfinkel & Sacks 1986), the similarities between the current form of ethnomethodology and CA are not explicitly discussed (see Heritage 1984 for a general discussion of their similarities). This chapter has discussed two established links (i.e., reflexivity and indexicality), and will continue to do so by introducing an underpinning concept of the two.

Ethnomethodology and CA offer a unique way of approaching, compiling, and analyzing data because both disciplines are deeply rooted in the study of sociology (Markee 2000; Schiffrin 1994). This distinctiveness is further exemplified in ethnomethodology and CA's belief that talk-in-interaction is the vehicle in which intersubjectivity manifests. Such a belief can be seen as a radical departure from the traditional prescriptive nature of sociological theories (Heritage 1984). Subscribing to the "...belief that no detail of conversation (or interaction) can be neglected *a priori* as unimportant" is fundamental in appreciating the epistemological foundation of ethnomethodology and CA (Schiffrin 1994, p. 232). Clayman and Maynard (1995, pp. 3-4) also believe that "Since the intelligible features of society are locally produced by members themselves for one another, with methods that are reflexively embedded in concrete social situations, the precise nature of that achievement cannot be determined by the analyst through a priori stipulation or deductive reasoning." Ethnomethodology and CA is therefore an inductive methodology, taking an inside, participant perspective to data analysis.

What makes this approach to data analysis different from other forms of discourse analysis is the attention paid to the methods used to achieve intersubjectivity. As highlighted in the previous sections, reflexivity and indexicality are central to an understanding of the locally produced order of talk-in-interaction. Although CA shares some disciplinary interest with other forms of discourse analysis (e.g., interactional sociolinguistics, social psychology, and the ethnography of communication), the ethnomethodological principles that inform CA are like no other analysis of talk-in-interaction (Markee 2000). It is precisely this epistemological link that differentiates CA from other styles of analysis. From a methodological standpoint, this can be differentiated between taking an etic or emic approach to data analysis. The subsequent section will explain how CA fits within the former approach, and how this is relevant to an epistemological understanding of reflexivity and indexicality.

3.3.1 Etic and emic interpretations

This chapter has discussed in detail the epistemological thrust of reflexivity and indexicality (Section 3.1), and how these concepts are manifested in the organization of talk-in-interaction (Section 3.2). This link can be discussed further in relation to its perspective to data analysis. The objective of this section is to discuss what perspectives to data analysis are available to researchers.

Two general standpoints for the analysis of data are available to researchers. These standpoints are etic and emic (see Markee and Kasper 2004 for a discussion on the ontological controversy over etic and emic standpoints). Pike (1966, p. 152) summarizes these concepts in the following passage.

> "It proves convenient—though partially arbitrary—to describe behavior from two different standpoints, which lead to results which shade into one another. The etic viewpoint studies behavior as from outside of a particular system, and as an essential initial approach to an alien system. The emic viewpoint results from studying behavior as from inside the system."

Pike (1966) maintains that etic and emic viewpoints are not a dichotomy, though he believes each lens will capture a different picture. Through an etic lens, researchers investigate data with preconceptions and exterior beliefs. The way NfMs have been investigated in the Input-Interaction framework is an excellent example (see Section 2.5). Through an emic lens, researchers investigate data from participants' perspectives, with a particular focus on the self-explicating nature of the local context. Examples of self-explication and participant perspective are reflexivity and indexicality (see Section 3.1). It is crucial at this point to stress the fact that a participant perspective from an emic CA account does not include data from interviews, focus groups, or any other participant induced methods (see Section 3.2.1; also, see ten Have 1999, 2004 for the epistemological justifications for not using these types of data collection). As highlighted in Section 2.2.1, a conceptualization of tasks taken from a task-as-workplan perspective is etic, whereas an understanding of tasks taken from a task-in-process standpoint is etic or emic, depending on what methodology is adopted (see Seedhouse 2005 for how this may affect classroom task-based interaction).

How reflexivity and indexicality are borne out in the emics of CA requires attention to the normative and inferential properties of talk-in-interaction. Markee and Kasper (2004, p. 495) believe

> "CA establishes an emic perspective…by examining…the orientations and relevancies that participants display to each other through their interactional conduct (Schegloff, 1992[b]). Thus, participant orientations, relevancies, and intersubjectivity are not treated as states of mind that somehow lurk behind the interaction, but as local and sequential accomplishments that must be grounded in empirically observable conversational conduct."

The quote above demonstrates how CA adopts an emic approach to data analysis; however, it does not demonstrate what characteristics differentiate the emics of CA from other forms of discourse analysis. Thus, the remaining portion of this section will discuss

how the emics of CA differ from the type of discourse analysis adopted by Input-Interaction researchers.

Pike (1966) identifies ten characteristics that differentiate etic and emic standpoints. Four of them are directly relevant to the current discussion. They are as follows.

1. Units available in advance versus determined during analysis
2. External versus internal plan
3. Absolute versus relative criteria
4. Non-integration versus integration

(Modified from Pike 1966, pp. 153-154)

The first two characteristics are similar, in that they both deal with the units, classifications, and frameworks (plans) that are used to analyze data. From an etic standpoint, interpretations of data are conceived from predefined units, classifications, or frameworks (e.g., the three C's or the NfM; see Section 2.5.1). From an emic standpoint, all features of interaction are relevant to the interpretations of data unless deemed irrelevant during data analysis (e.g., CA; see the previous sections).

The next two characteristics are concerned with whether interaction is quantifiable. From an etic standpoint, specific characteristics of data can be taken out of context and directly measured (e.g., quantifying NfMs to validate SLA). From an emic standpoint, specific characteristics should be described in relation to other internal characteristics (e.g., intersubjectivity or reflexivity). The issue of non-integration versus integration deals with whether units of analysis are independent (e.g., quantifiable) or dependent (e.g., adjacency pairs) of a larger system, respectively.

From these four characteristics, it is easy to see how CA differs from the type of discourse analysis employed in Input-Interaction studies. Furthermore, as this chapter has shown, ethnomethodology and CA is a distinct form of data analysis, with its own set of

assumptions and analytical tools. The final section of this chapter will provide reasons for using some of these assumptions and tools.

3.3.2 Justifications and summary: Ethnomethodology and CA

This section will briefly discuss the justifications for applying CA. In regard to the construct validity of tasks and the NfM in task-based interaction (see Section 4.5 for the research questions), it should be clear by now what an emic approach to data analysis can offer to this thesis. For instance, ethnomethodology and CA insist on focusing on the methods participants use to achieve intersubjectivity (e.g., the normative and inferential properties of talk-in-interaction). This emic perspective can shed new light on task-based interaction because (1) examining the construct validity of tasks and reconciling task perspectives requires a detailed account of the reflexive and indexical ways in which task-takers interpret and negotiate tasks (see Section 3.1), and (2) repair, and the NfM, is highly ordered and sequentially fixed to the turn-by-turn moments of task-based interaction (see Section 3.2.3). That is to say, "The significance of an utterance or gesture is highly dependent on its position in a sequence, as well as being jointly negotiated, and this is one reason for conversation analysts' reluctance to aggregate instances of utterance types for quantitative analysis" Stubbe *et al.* (2003, p.354).

This quote leads to the next justification for using ethnomethodology and CA. A large portion of the task-based interaction literature is represented by Input-Interaction studies (i.e., an etic perspective). Consequently, their results or conclusions come primarily in the form of quantitative analysis (see Foster and Ohta 2005, pp. 417-419 for a classic example). Since quantification is not a primary mode of analysis for an emic CA approach to data analysis (see Chapter 5 for numerous examples), the Input-Interaction framework can offer little to this thesis.

Lastly, this thesis is centrally concerned with task-based interaction itself, as opposed to task-based interaction as a source of input. The latter assumption seeks specific units of input that are representative of SLA (etic), whereas the former belief regards interaction as the object of study (emic). Again, this predefined way of analyzing data is not suitable for an ethnomethodological and conversation analytic understanding of task-based interaction. The next chapter will explain the study in more detail.

CHAPTER 4: THE STUDY

The previous chapter discussed the methodologies adopted to analyze the data of this thesis. This chapter will explain the methods that were used to coordinate these approaches. The first section of this chapter will explain how and where the data were collected (Section 4.1). Section 4.2 will introduce the research participants, and Section 4.3 will describe the tasks that the research participants have used. The last section will demonstrate how the type of task-based interaction that occurred in this thesis is an institutional activity. This will be followed by the research questions posed in this thesis.

4.1 Data Collection and Research Setting

Data collected in this thesis came from analog and digital audio recordings of NNSs of English carrying out non-classroom tasks. That is, all task-based interaction data collected and investigated in this thesis occurred outside of a classroom (N.B. the tasks used in this thesis have been used in both classrooms and laboratory contexts; see Section 2.5.3). This was done because studies have shown that classroom norms and teacher presence can influence task-based interaction (see Pica 1987; Seedhouse 2004). In regard to generalizability, it is also important to distinguish between tasks that are completed in a classroom, and those that are not (though see Gass, Mackey, and Ross-Feldman 2005 who find little interactional difference between the two). Furthermore, no teachers or researchers were present during the recording of data. Adopting this type of research setting limits the generalizations that can be made to classroom tasks. However, because the research questions set forth in this chapter do not aim to draw pedagogical implications, this should not be seen as a limitation.

Approximately ten hours of audio recordings were collected. This total amounted to twelve dyads completing seventy-two tasks. Each research participant completed only one task session (i.e., one task-taker was not part of several dyads). A total of twenty-four research participants volunteered their time. While quantitatively speaking, twelve dyads may seem like an insignificant number, in CA terms, the time and detail needed to transcribe and analyze such data is quite significant (N.B. the corpus consisted of approximately eighty pages of transcripts). Video recordings of tasks were not collected because some research participants thought it would be too obtrusive (N.B. interactional features, such as gestures and eye movement, are important characteristics; the absence of both limit the scope of this thesis). All research participants gave oral consent to the audio collection of data.

There were three ways in which research participants were contacted. Firstly, announcements were posted at various campus locations requesting NNSs of English to volunteer in a research project. Secondly, postgraduate language science students were emailed with a similar message. Lastly, some research participants were contacted through mutual acquaintances (e.g., a recommendation from someone who had previously volunteered). If asked, the general research aim was explained to research participants (i.e., to study the communication between interlocutors), but no specific details were given.

Generally through email, and sometimes by phone, meeting times were established and dyads were matched according to their schedules. The place of recording occurred in a sound lab or small conference room, but if none of these locations were convenient for the participants, tasks were conducted and recorded at the comfort of their homes. All five tasks were completed in approximately thirty to fifty-five minutes (see section 4.3 for a full description of the tasks used in this thesis). All research sites consisted of a place for each interlocutor to sit and a communal table to complete the tasks. In each recording, the researcher would start the audio-recorder, hand each participant their tasks, and leave the room (Section 4.4 will explore the institutional characteristics of task-based interaction). Before moving on, it should be noted that any generalizations made in future chapters are restricted to only the type of task-takers who participated in thesis. For example, because the research participants volunteered their time, some may speculate that they are more extrovert than others. It is also important to bear in mind that most of the research participants come from Asian countries, as the subsequent section will introduce.

4.2 The Participants

All research participants were international postgraduate students at the University of Newcastle upon Tyne; their area of study consisted of various academic disciplines (e.g., engineering, literature, applied linguistics). Bearing this in mind, and in conjunction with general international postgraduate English language entrance requirements (i.e., IELTS or TOEFL), the research participants' English language proficiency was at an upper-intermediate to advanced level.

No attempt was made to control the composition of any dyads in regard to demographic variables (e.g., matching participants by their native language). It should be recalled that CA does not use preconceived notions or constructs to organize and analyze data. It is only when it is shown to be relevant in the data (i.e., the participants) that CA discusses issues, such as how ethnicity or nationality affects interaction (N.B. it is also for this reason that the task-takers in thesis are represented in transcripts as S1 and S2; i.e., speaker 1 and speaker 2).

Moerman (1996, p. 155) puts this thought into perspective when he states "Society and its vernacular categories do not exist independent of social interaction. Such factors…their age, gender…or the type of setting – formal vs. informal, for example – have no pre-existing free-standing privileged status as entities that can be sampled and correlated with interactive events that they are then said to account for."

Country of origin and linguistic background spanned the globe, but most research participants came from Asian countries (N.B. because CA does not traditionally use sex, age, country of origin, or any other categorical concepts, the following table should only be seen as a point of reference).

However, a few general comments will be discussed. All of the research participants were in their twenties except for three that were above the age of thirty-five. Four of the

dyads were of a male-female format, one of a male-male format, and the rest of a female-female format. As mentioned before, twenty-four task-takers participated in this thesis. The following table illustrates the basic composition of each dyad.

Table 4.2 - Basic dyad composition

Dyad Number	Country Origin	Dyad Makeup
Dyad 1	Korea – China	Female-Female
Dyad 2	Thailand – China	Female-Female
Dyad 3	Iran – China	Female-Female
Dyad 4	China – China	Female-Male
Dyad 5	Thailand – Taiwan	Male-Female
Dyad 6	Spain – Vietnam	Female-Female
Dyad 7	Thailand – Thailand	Male-Male
Dyad 8	Thailand – Japan	Female-Female
Dyad 9	Macao – Hong Kong	Female-Female
Dyad 10	China – Hong Kong	Male-Female
Dyad 11	Taiwan – Taiwan	Male-Female
Dyad 12	Vietnam – Sri Lanka	Male-Female

4.3 The Tasks

Each dyad was responsible for completing five tasks. Although the dyads were given an approximation of how long the task session should take, no time limits were used. All five tasks were printed on two A4 sheets of paper. On the top of this document (see Appendix B), general task directions were given (e.g., 'try completing a task before moving on to the next one'). Before each task, interactional guidelines were given and where applicable, interactional rules were proscribed (e.g., 'please do not use hand gestures'). None of the tasks have been taken directly from existing material; however,

some tasks have been adapted from previous research. Where possible, reference will be given to its original source. These tasks were used because they are variations of task used in previous studies. Furthermore, most of the research participants should be familiar with them because they are traditional forms of tasks used in standardized tests and language classrooms. The extent to which these tasks are typical of others used in previous studies is proximal since both share the same task dimensions investigated in this thesis (e.g., one-way information gap). The subsequent subsection will discuss each task in detail.

4.3.1 Task 1: Get to know your partner

In this task, task-takers were directed to discuss two similar and two dissimilar characteristics between the two of them (N.B. see Appendix B for each of the dyads used in this thesis). A Venn Diagram was available to aid in this process (i.e., two overlapping circles were used to help identify similar and dissimilar characteristics). This task looks much like a warm-up activity. That is, the 'get to know you partner' task title and directions are presented as if the establishment of identities are conducive for future interactional work. Indeed, this was partially the justification for sequencing this task in such a way; however, the structural framework of Task 1 represents a more fundamental, underlying concern. Namely, the structural framework of Task 1 is commonly known as a two-way information gap task with a convergent (or closed) task outcome. The topic structure of this task is more subjective or social (cf. objective or spatial), and contains a discourse domain that pivots between narratives and expressives.

4.3.2 Task 2: Controversial statement

This task required both task-takers to read four controversial statements and discuss their meanings. The four statements were as follows: 'English is the world's official language', 'Sick people should be able to end their life', 'A woman belongs at home', and

'War is necessary for future peace'. The structural framework of this task is known as a two-way opinion gap task with a divergent (or open) task outcome. The discourse domain is centered mainly within narratives, whilst the task topic is human or ethical in nature. The task objective, or task-as-workplan, was to encourage task-takers to have a lively discussion whilst justifying their opinions.

4.3.3 Task 3: Blind drawing

The blind drawing task required task-takers to perform two different interactional roles. The first role involved describing a picture, while the second role required drawing the picture from the description (Pica *et al.* 1991 use the same task). The roles were switched after the first picture was drawn. Both pictures were different, and interactional restrictions were established (i.e., 'do not show each other your picture' and 'do not use hand gestures'). Task 3 is a one-way information gap task with a convergent task outcome. The discourse domain and task topic are descriptive or expository and objective or spatial, respectively. The task-as-workplan was to encourage task-takers to NfM.

4.3.4 Task 4: Map game

This task is a modification of the one used in Lindemann (2002). In this task, both task-takers had a map with various landmarks; most of these objects were the same, though some were missing or slightly different (e.g., one duck versus no duck, and one airplane versus two airplanes). One task-taker was required to give directions to the other from the start to finish. The reason for adding these deviations was to increase the difficulty in communicating. This is actually a common way of inducing and examining the NfM in task-based interaction (see Section 2.5.3). Lastly, one task-taker did not possess the map route, and was required to follow the directions given by his or her fellow interlocutor. Interactional rules were also established in this task (i.e., 'do not show each other your map' and 'do not use hand gestures'). The structural framework of

Task 4 is a one-way information gap task with a convergent task outcome. The term asymmetrical can also be used because both task-takers have a map, but only one possesses the route (i.e., both task-takers have a disproportionate amount of information). The discourse domain of this task is descriptive or expository, and its topic orientation is objective or spatial. Again, the task-as-workplan was to promote interactional repairs or the NfM.

4.3.5 Task 5: Sentence meaning

Task 5 required both task-takers to read a convoluted sentence ("The mouse the cat the dog barked at chased died.") and answer three questions pertaining to it. This sentence is commonly used in descriptive syntactic analysis. The questions pertained to an understanding of 'who the dog barked at', 'what was chased', and 'what animal died'. Although the structure of this task can easily be mistaken as a grammatical exercise, or an explicit focus on sentence structure (i.e., focus on formS or form before meaning; see Section 2.5.2), the majority of the interaction occurring was communicative (see Mondada and Pekarek Doehler 2004). It is important to note that it was not the objective of this thesis to analyze the accuracy of the interaction, but to investigate its organization (see Cook 1975 for implications of analyzing within the former domain). Because both task-takers have an equal amount of information that is required to complete the task, the participatory structure of Task 5 is a two-way information gap. However, some task-takers may assume an expert role, thereby acting as an information provider. This may slightly alter the dynamics of the participatory structure of tasks (see Extracts 28 and 29). The task outcome in both alternatives is convergent (closed). The discourse domain and topic structure is descriptive and objective, respectively. The objective of this task is to encourage metalinguistic talk.

The next section will now discuss how the tasks used in this thesis are at times governed by institutional constraints. The purpose of this section is to demonstrate how these tasks are applicable to the topics discussed in Chapter 2 (i.e., task perspectives). This section is located at the end of this chapter because it provides a good transition between the tasks discussed above, and the data analysis offered in Chapter 5.

4.4 Tasks as an Institutional Activity

The notion that talk-in-interaction can be bound to certain institutional norms and practices is well established in CA literature (Schegloff 1992b). For example, Seedhouse (2004) has claimed after extensive analysis of classroom transcripts, that classroom turn-taking mechanics is reflexively linked to a particular pedagogical focus. Other CA researchers have examined the unbalanced distribution of knowledge, and its institutional constraints, on hospital and courtroom encounters (see Drew and Heritage 1992 for a comprehensive account of institutional talk). This form of CA work, that is the study of institutional talk, is concerned with the identification of social action (Heritage & Atkinson 1984). Specifically, a conversation analytic account of institutional talk focuses on the actions and interactions that are instantiated in a larger, macro setting. With this in mind, Schegloff (1992b, p. 106) poses the question, "...whatever observations we initially make about such features of social organization as these work and bear on interaction, how do we translate them into defensible, empirically based analyses that help us to get access to previously unnoticed particular details of talk-in-interaction, and appreciate their significance?"

This quote bears significance on this thesis because task perspectives will be investigated. Although CA does assume talk can be bound or constrained by macro variables (e.g., a task's objectives or classroom rules), it is, as Chapter 3 as highlighted on several occasions, how participants respond within these constraints that underlines a

conversation analytic account in general, and institutional talk in particular. CA in effect acknowledges the institutional constraints a classroom or a task, for example, may have on talk-in-interaction. However, the point of departure for CA (cf. critical discourse analysis; see Korobov 2001) is its view that 'context' is self-renewing (see Reflexivity and Indexicality in Sections 3.1.1 and 3.1.2, respectively). In particular,

"...proponents of CA...reject what has been called "bucket theory of context" in which some preestablished social framework is viewed as *containing* the participants actions (in other words, that the frameworks carry around inherent meanings). Instead, CA argues for a more dynamic approach in which context is treated both as the *project* and *product* of the participants own actions and therefore as locally produced and transformed at any moment..." (Korobov 2001, p. 2).

The dynamic interchange between how task-takers are governed by institutional constraints on the one hand (e.g., norms, rules, expectations), yet work within their own parameters on the other (i.e., local production), demonstrates the significance of tasks as an institutional activity. This issue resonates with the task-as-workplan and task-in-process discussion. That is, the institutional constraints of a task-as-workplan may or may not be borne out in task-in-process. The following extracts will offer a clear example of how some task-takers conform to institutional constraints, whereas others do not (N.B. these extracts are not methodological justifications, but examples of how task-based interaction is an institutional order). In this first extract, both task-takers are completing Task 3. The picture describer is S1, and the picture drawer is S2.

Extract 9: Dyad 2 – Task 3a

1 S1: =arrows (0.5) arrows (0.9) arrows (0.2) A-double R-O-W ((spelling the word))
2 (0.9) arrows (0.5)
3 S2: <u>arrows</u>? (0.4)
4 S1: arrows (0.6) arrows (1.2) arrows
5 S2: two arrows
6 S1: yeah two arrows=
7 S2: =like this? (1.6)
8 S1: n- (0.2) no no no (1.1) a- (1.6) how to say it (1.1) we um: (0.2) we are permitted
9 to: um: (0.7) to accept any gestures or (.) a[ny]
10 S2: [hh.haha]ha yeah ha.hh
11 S1: body signa[ls]
12 S2: [·hh]hh uh huh=

13 S1: =you just draw two arrows (0.5) arrows (1.1)

This extract begins with S1 describing a shape for S2 to draw. The apparent difficulty in comprehension or communication is evident by the series of pauses and upgraded repair in line 1 (N.B. the upgraded repair is the shift from repetition of 'repair' to spelling of 'repair'). The difficulty continues in lines 2-6 (a detailed discussion on repair resources is discussed in Sections 5.3 and 5.4). Finally in line 7, after much negotiation, S2 ostensibly makes a body gesture and requests a confirmation ('like this?'). After a pause, S1 reminds S2 that Task 3 does not allow body or hand gestures. After some simultaneous giggling and acceptance ('yeah' and 'uh huh') in lines 10 and 12, S1 proceeds to tell S2 to simply draw the two arrows. This short exchange clearly illustrates conformity to a particular institutional constraint (i.e., a task rule). Extract 10, on the other hand, demonstrates task-takers willingness to bend the rules. In this extract, S2 is the picture describer, and S1 is the picture drawer.

Extract 10: Dyad 1 – Task 3b

1 S1: oh::↓ (0.7) my drawing is very poor so ho[w can] I draw that=
2 S2: [he he]
3 S2: =hehe (0.6)
4 S1: hm::eh. (2.3) °same like° (4.6) °is it°
5 S2: it ok (1.5) °right° (3.3)
6 S1: its like (0.2)
7 S2: yeah=
8 S1: =like this (0.2)
9 S2: yeah it like=

To frame Extract 10, for approximately forty-two lines before line 1, both task-takers have been discussing a toilet in S2's picture. In line 1, after S1 realizes that the referential point is a toilet, she testifies to her inadequate drawing skills ('my drawing is very poor'). After some contiguous laughter by S2, the relatively long pauses and follow-up question ('is it') in line 4 indicates that S1 is drawing the toilet . At this point it is impossible to identify what the task-takers are showing each other because video recordings were not collected. However, S2 immediately provides a positive assessment

of the picture in line 5 ('it ok…right'). This establishes that S1 did indeed show her drawing to S2. The accuracy of the drawing is verified by S1 in lines 6 and 7 ('its like…like this'). Both of these assumptions are reconfirmed by S2 in lines 7 and 8 ('yeah…yeah it like'). Therefore, it can be said with relative certainty that both task-takers in this extract broke the rules in order to complete the task.

Extract 10 provides a clear example of how task-takers may not conform to institutional, normative constraints (N.B. task-takers would occasionally employ gestures). Whereas the referential obstacle in Extract 9 (i.e., arrows) was not great enough to lead to rule breaking, the referential difficulty in Extract 10 (i.e., toilet) proved to be difficult enough to break a rule. Clearly then institutional constraints have an influential role in task-based interaction. Yet it is the task-takers who ultimately decide on institutional conformity. Finally, it is important to note that Extracts 9 and 10 have only demonstrated how one particular institutional variable (task rules) may influence task-in-process. The data discussed in Chapter 5 will deal with another influential institutional task-as-workplan variable (i.e., the participatory structure of tasks).

The upshot of this discussion on tasks as an institutional activity is the notion that context (e.g., task-in-process), though dynamic and self-renewing, may be bound to certain institutional constraints (e.g., task-as-workplan). From a task-as-workplan perspective, task-in-process occasionally performs as expected (e.g., Extract 9), while at other times it does not (e.g., Extract 10). This variability provides support to the notion that task-in-process is difficult to predict from task-as-workplan perspective (see Section 2.2). As highlighted on numerous occasions, the interactional relationship between institutional constraints on the one hand, and talk-in-interaction on the other, is the underlying theme of this thesis. The specific research questions that will be answered in this thesis will follow.

4.5 Research Questions

The literature reviewed in Chapter 2 focused on two specific, but related task-based interaction topics. The first topic, the construct validity of task, was discussed vis-à-vis task-as-workplan and task-in-process. It can be recalled that task-takers' interpretations and negotiations of task-as-workplan will partly shape task-in-process. Reconciling task perspectives is consequently vital to ensuring the construct validity of tasks. Therefore, the first research question set forth in this thesis is aimed at understanding the relationship between task-as-workplan and task-in-process.

The second topic, the NfM in task-based interaction, was discussed as it is framed within the Input-Interaction framework. Studies such as these claim that tasks can encourage task-takers to NfM, and as a result, develop linguistically. The last two research questions set forth in this thesis are related to the question of whether tasks encourage task-takers to repair. Unlike studies informed by the Input-Interaction framework, this thesis does not see task-based interaction as merely a source of input. This thesis will invariably investigate task-talk and repair within its local, sequential context.

1. What interactional influence does a task-as-workplan have on a task-in-process?
2. Do tasks encourage task-takers to repair?
3. What repair resources do task-takers use in task-based interaction?

As Chapter 3 has discussed in detail, the three research questions above will be investigated by using an ethnomethodological and conversation analytic understanding of task-talk. Because transcripts of talk are significant in CA, the data analysis sections will rely heavily on its use. The next chapter will attempt to answer the above questions.

CHAPTER 5: DATA ANALYSIS

Chapter 2 identified two dependently related task-based interaction issues that are central to the investigation of this thesis. They were the construct validity of tasks and the NfM in task-based interaction. At the end of Chapter 4, three research questions were given. The first question is related to the construct validity of tasks, whereas the last two questions are concerned with the NfM in task-based interaction. As a result, this chapter is divided into three main sections (5.1, 5.2, 5.3), each devoted to answering these research questions.

5.1 What Interactional Influence Does a Task-as-Workplan Have on a Task-in-Process?

It was claimed in Chapter 2 that most conceptualizations of tasks possess some type of cause and effect inference. That is, they all make assumptions about what a task is, and is capable of doing. The relationship between cause (e.g., task-as-workplan) and effect (e.g., task-in-process), however, must be examined. As Zeller (1988) has stated, construct validity is crucial to the reliability of any social science measure. Therefore, this section will investigate the interactional relationship between task-as-workplan and task-in-process. This initial stage of analysis will provide data that will help illustrate the need to consider a task's construct validity. As Section 2.2.1 has demonstrated, the first step in construct validation is to identify and reconcile task perspectives. The following sections will show how on the one hand, even the most basic element of a task-as-workplan will influence task-in-process, and on the other, how task-takers' understanding of task-as-workplan will cause task-in-process variation. The actual reconciliation of task perspectives will be done by sequentially identifying the organization of turn-taking, as it is related to participatory structures.

5.1.1 Participatory structures and turn-taking rights

After reviewing the corpus of data, it appears that turn-taking rights (and consequently, sequence) are governed by the participatory structure of tasks. However, the term turn-taking 'rights' is used very loosely in this thesis; the different patterns of interaction that occur as a result of participatory structures can also be seen as a matter of interactional leverage. An interactional leverage refers to the way the distribution of information influences patterns of interaction. Specifically, referential task information, which is distributed by participatory structures, dictates how task-takers manage their turns.

Although additional task dimensions have been investigated within other task-based interaction studies (e.g., discourse domain and topic orientation), only the participatory structure dimension can be seen as influencing the turn-taking rights in this thesis. That is not to say other task dimensions do not have a role in influencing the sequential organization of task-based interaction. On the contrary, other task dimensions may (Ellis 2000), and probably do (Swain & Lapkin 2001), have some interactional role in task-based interaction (Swain *et al.* 2002).

However, in the interest of space and clarity, it is the participatory structure of tasks that will be discussed (N.B. the purpose of this section is not to account for all task dimensions, but to describe the relationship between task-as-workplan and task-in-process). The discourse domain and topic orientation dimensions do, however, influence the content of what task-takers say; nevertheless, this issue is neither a primary concern for CA researchers (Sacks 1984), nor shown to influence turn-taking (compare, for example, Extracts 14 and 18).

In the following extract, both task-takers are completing Task 4. It can be recalled that the participatory structure of Task 4 is a one-way information gap. That is, one task-taker possesses referential information the other one does not. In this thesis, the task-taker who possesses the missing referential information is referred to as the keeper of more information, whereas the task-taker who is missing referential information is the keeper of less information. In the following extract, S2 is the keeper of more information and S1 is the keeper of less information. This uneven distribution of referential information is manifested in the turns taken by task-takers.

Extract 11: Dyad 2 – Task 4
1 S2: start from the:=
2 S1: =book> (2.0)
3 S2: yeah↑ maybe (.) just one book (0.3)
4 S1: yeah (0.3)
5 S2: just one book

6 S1: yeah start from one book and then you (.) where where to go wh- where do you go
7 S2: uh: (.) like a little sheep in front of (1.1) see it clearly this picture not printed well
8 (1.0) like li- (.) little sheep like a sheep (1.7)
9 S1: °oeh°
10 S2: then (0.3) a plane (0.6) airplane (0.5) and then go to airplane
11 S1: go to airplane first=
12 S2: =yeah
13 S1: right?
14 S2: no no no (0.4) sheep first (0.8)
15 S1: sheep (.) sheep
16 S2: yeah from (.) book to sheep (1.7)
17 S1: from the the book to a sheep I- I dont see any sheep (1.5) S-C-[H]
18 S2: [its] house (0.6) its
19 house (1.0) like (0.7) like house or like a like (0.5) like a something (1.5)

In Extract 11, both task-takers are attempting to navigate through a map. Although both task-takers are information keepers (i.e., both possess information crucial to the successful completion of the task), S2 is in possession of the route. In this extract, the participatory structure helps establish and maintain the interactional agenda. For instance, though throughout this extract S1 successfully bids for turns, each turn is inline with S2's interactional agenda. The first interactional agenda is established by S2 positioning S1 according to the book (lines 1-6). In lines 2, 4, and 6, S1's turns are all in sequence with the negotiation of the book, though the second turn unit in line 6 momentarily establishes the interactional agenda ('...then where do you go...'). That is to say, S1, the keeper of less information, has the opportunity to momentarily establish the interactional agenda when a landmark is realized. However, the interactional agenda is ultimately reestablished by S2, the keeper of more information.

To put it in another way, S1 does not have the ability to establish and maintain the interactional agenda because she does not know where the route goes. For instance, the next interactional agendas, the sheep and the plane, are established and maintained by S2. By questioning the precise sequence (lines 10-14) and identification (lines 15-19) of these landmarks, S1 is demonstrating the asymmetrical distribution of information. That is to say, one-way information gap tasks provide an interactional leverage that benefits the

keeper of more information (cf. the symmetrical leverage in Extract 12). In this task, the participatory structure provides an interactional blueprint (i.e., influences that pattern of interaction). However, as established in the task definition given in Section 2.2.2, an interactional blueprint establishes, but by no means restricts, a framework in which task-takers are to work. Variations within an interactional blueprint will be illustrated in subsequent sections. For now, further examples will be provided to demonstrate the relationship between participatory structures and turn-taking rights.

In the following extract, both task-takers are completing Task 1. The participatory structure of this task is a two-way information gap. That is, there is an even distribution of referential information. Because there is an equal interactional leverage between both task-takers, interactional agendas can be initiated and controlled by either task-taker (cf. interactional agendas are largely dictated by the keeper of more information in one-way information gap tasks). How this is manifested in the management of turn-taking is illustrated below.

Extract 12: Dyad 6 – Task 1

1 S2: uh::m (1.4) I::m, (1.9) I know what in English (.) Im not very patient (0.7)
2 im[patient]
3 S1: [youre no]t ver[y] (0.2) youre very impatient
4 S2: [yeah]
5 S2: yeah im[patient]
6 S1: [instead] of youd better write this down (0.4)
7 S2: hhh.he.heh (.) yeah? (.) sorry (0.3) hh.hehe notalotta re- (1.2) I just know (0.7) so,
8 (0.3) are you impatient or patient
9 S1: uh: (0.5) it depends (.) I feel very impatient some[times] but (0.2) for certain
10 things Im great (0.8)
11 S2: [okay]
12 S2: okay (0.8)

The objective of this task is for both task-takers to identify two similar and dissimilar characteristics. In line 1, S2 begins Task 1 by identifying a representative characteristic ('I'm not very patient...impatient'). This initial statement establishes the interactional agenda. More specifically, both task-takers are required to share their characteristics. As

a result, both task-takers possess information the other task-taker does not have. This is apparent in line 3, where S1 confirms the fact that S2 is impatient ('you're very impatient'). Again, because this task consists of a two-way information gap, both task-takers must confirm whether S1 is also impatient. This is manifested in line 7, where S2 asks whether S1 shares the same characteristic ('are you impatient or patient'). Therefore, in this task, turn-taking is reflexively tied to the fact that both task-takers do not know each other's characteristics, and must therefore employ a series of negotiations to achieve a co-constructed knowledge. For example, in Extract 13, a different dyad is also attempting to establish a set of characteristics.

Extract 13: Dyad 1 – Task 1

1 S1: flexible (0.6) mm: (0.2) open minded (1.6)
2 S2: >mm hm> (2.0) mm (2.2) probably o- open minded (0.6) b- (0.5)
3 S1: oh:::: hhh.hehe[he ·hh.hehe]he i.hh.s i.hh.t close mi.hh.nded I[m no]t sure
4 S2: [·hh.hh.hehe] [·hh.hh]
5 S1: hh.hehe·hh narrow minded? hh.hehe·hh Im not sure hh.hehehe ·hh (1.4)
6 so[::] you dont think that you are open minded (1.0)
7 S2: [mm] n,o

Again, in this extract both task-takers are establishing a characteristic, or an interactional agenda. In line 1, S1 begins with a set of considerations ('flexible...open minded'). The second characteristic is acknowledged by S2 in line 2 ('probably open minded'), but it takes several turns for these task-takers to establish who is or is not open-minded. More specifically, the fact that both task-takers do not know each other's characteristics (i.e., two-way information gap) is demonstrated by the series of negotiations occurring in lines 3-7. In line 3, S1 offers an opposite of her characteristic ('close minded'), though it is not clear at this point if she is assuming S2 possesses a dissimilar characteristic. Later in line 4, S1 provides another alternative with rising intonation ('narrow minded?'). This utterance or question does, however, demonstrate that S1 is questioning S2's open mindedness. After a short pause in line 5, S1 upgrades her previous utterance with a more explicit question ('so you don't think your are open

minded'). The open-minded characteristic is rejected by S2 in line 7. Consequently, this final upgraded question and answer pair is successful in establishing if the open-minded feature is a similar or dissimilar characteristic.

As Extracts 12 and 13 have shown, two-way information gap tasks also influence interactional patterns. As previously mentioned, both task-takers have information the other one does not. This participatory structure is manifested in the basic turn-taking procedures of Task 1 (i.e., the reciprocal demand of establishing and then confirming similar or dissimilar characteristics). Although the task-takers in this corpus have several ways of establishing a characteristic (e.g., Extracts 12 versus 13), they are always jointly responsible for establishing and then maintaining the interactional agenda (cf. the one-way information gap). It should be noted that establishing a characteristic (or any other referential task information) is an interactional agenda because doing so is necessary in order to complete the task.

Thus far, two types of tasks have been discussed. The first example demonstrated how a one-way information gap (Task 4) can restrict the turn-taking rights of the keeper of less information. The second example showed how a two-way information gap (Task 1) provides an interactional blueprint where both task-takers are jointly responsible for completing the task. However, one type of participatory structure has yet to be discussed. In particular, the opinion gap structure of Task 2 provides another example of how participatory structures influence turn-taking.

Whereas the two previous tasks require an exchange of specific referential information (Task 4 required one task-taker to describe a route, and Task 1 required both task-takers to share characteristics), Task 2 is not so referentially limiting. Specifically, Task 2 requires that both task-takers provide an opinion to a controversial statement. Task-takers' contributions in opinion gap tasks can be seen as open to an unlimited set of

extensions, elaborations, or justifications (cf. the contributions to Tasks 1 and 4). How this affects the turns taken by task-takers will be illustrated in the following extracts.

In Extract 14, both task-takers are completing Task 2. As discussed in Section 4.3.2, Task 2 encompasses four controversial statements. The task-takers are to read each statement and discuss their meaning. Again, this type of participatory structure is called a two-way opinion gap (i.e., both task-takers give their opinion).

Extract 14: Dyad 3 – Task 2

1 S1: shall we begin (0.3) fir[st] sentence (0.9) English is the worlds official
2 S2: [uh huh]
3 S1: language (2.1) unfortunately it is (0.3)
4 S2: mm hm (0.2) yeah (1.2)
5 S1: the second (1.5)

In line 1, S1 establishes the interactional agenda by reading the first controversial statement. After a noticeably long pause in line 3, S1 regains the floor by establishing her viewpoint ('unfortunately it is'). The pause in this case (and many others) represents an open floor. That is, both task-takers have an opportunity to regain or take the interactional floor. This equal distribution of interactional rights is much different than the participatory structure of one-way information gap tasks (and analogous to two-way information gap tasks). In line 4, S2 provides two agreement tokens ('mm hm' and 'yeah'), which also establishes her own viewpoint. This extract concludes with S1 establishing the next interactional agenda.

Although this opinion gap task possesses the same participatory structure of two-way information gap tasks, the type of information that is exchanged differs. In the latter, specific information must be used in order to complete the task, whereas in the former, there is more flexibility in what can be said. However, both types of tasks possess reciprocal opportunities for task-takers to initiate and maintain the interactional agenda. This is reflexively demonstrated in the following process: task-taker reads a controversial statement, the floor is open, the speaker who successfully bids for the floor provides a

viewpoint, and finally the other task-taker provides a supporting or disagreeing viewpoint. The entire process can be recycled until both task-takers reach a mutual understanding. Again, this process is very similar to two-way information gap tasks, where task-takers are mutually responsible for establishing and maintaining the interactional agenda. Accordingly, although the information that is being exchanged differs in both two-way opinion gap tasks and two-way information gap tasks, their participatory structure appears to be more influential in the way task-takers manage their turns. Extract 15 provides another opinion gap task example.

Extract 15: Dyad 4 – Task 2
1 S2: ok (.) fourth sentence (0.4) war is necessary for future peace (9.9) no (4.0)
2 S1: I think no war is necessary (1.2)
3 S2: war is necessary (0.8) for future peace (0.2)
4 S1: yeah (4.5) ((interactional agenda is recycled))

In Extract 15, both task-takers are discussing the final controversial statement. The statement is initially read by S2 in line 1. As previously mentioned in Extract 14, at this point the floor is open to both task-takers. Again, this is a product of the two-way participatory structure. The open floor is demonstrated by the almost ten second pause after the first turn construction unit in line 1 ('…war is necessary for future peace').

As in Extract 14, the same speaker regains the floor and provides a viewpoint. This viewpoint is followed by S2's own viewpoint. After S1 provides an acknowledgement token in line 4, the series of turns are recycled when both task-takers discuss the final controversial statement in subsequent lines of interaction. It can be said quite unequivocally then that the turn-taking rights in Task 2 are reflexively tied to the even distribution of referential information (in this case the referential information represents task-takers' exchange of opinions or ideas). The two-way flow of opinions also gives both task-takers the opportunity to recycle the interactional agenda. That is, because opinions are being shared, both task-takers are not limited to a specific set of information

(cf. Task 4, The Map Game). In the following section, further examples will be provided in order to illustrate how participatory structures influence turn-taking rights in the remaining tasks used in this thesis.

5.1.2 Further examples

The remaining one-way information gap task used in this thesis is Task 3. This task is divided into two sub-tasks. In each sub-task, one task-taker is required to describe a picture whilst the other task-taker draws. After one sub-task is completed, the interactive roles are switched. This uneven distribution of referential information renders the participatory structure of Task 3 as a one-way information gap. How this is manifested in turn-taking rights is discussed below. In this extract, S2 is the picture describer (keeper of more information) and S1 is the picture drawer (keeper of less information).

Extract 16: Dyad 3 – Task 3a

1 S2: °yeah° (1.1) and uh: inside of square there is u- an oracle (0.8)
2 S1: oracle?
3 S2: °oracle?° (.) °is that oracle° that Im not sure but uh (0.3) the picture uhm (0.3) a
4 circle? (1.0) a circle but not so round (0.9)
5 S1: oval shape (0.6) li[ke e]gg (0.3)
6 S2: [yeah]
7 S2: yeah↑ yeah yeah (0.4)
8 S1: i- is it big (0.9)
9 S2: yeah (0.2)
10 S1: is it[-]
11 S2: [v]ery big (.) yeah very ver[y big]
12 S1: [at the] center (0.5)

In line 1, S2 establishes the interactional agenda by describing a set of objects.

Because there is an asymmetrical distribution of information (i.e., one task-taker has the picture and the other one does not), each subsequent turn by S1 is inline with the interactional agenda. For example, the confirmation initiated by S1 in line 2 sustains the interactional agenda and gives the floor back to S2. Though ambiguity exists in the precise nature of the description ('Im not sure…a circle?'), S2 maintains the floor after the one second pause in line 4. Though this momentary pause opens the floor to both

task-takers, it is not taken by S1 because she does not know what the picture looks like. That is, because the keeper of less information does not know what the picture looks like, he or she will have a difficult time controlling the agenda (see Extract 11 for a similar analysis).

After the pause in line 4, S2 regains the floor and provides an upgraded description of the object ('a circle but not round'). Again, the confirmations provided by S1 in lines 5, 8, and 10, are all interactionally aligned with the agenda established by S2. In other words, the keeper of more information has the interactional leverage to establish and maintain the interaction agenda. Extract 23 provides an additional example. In this extract, S1 is the picture describer and S2 is the picture drawer.

Extract 17: Dyad 6 – Task 3a

1 S1: okay and, on the left hand side of the toilet (.)
2 S2: mm hm (0.3)
3 S1: there is like a Celtic cross (0.5) a cross that (0.4) is not like a Christian cross but
4 (0.5) to me that appears more like uhm (.) Celtic (0.3) cross or something (1.4) ·hh
5 and (2.0) there are two arrows (3.9) pointing (2.1) <to< a dog (1.5) a little (0.2)
6 dog
7 S2: so (.) the cross is, (.) above the dog (0.2)
8 S1: the cross is in the very:: (1.0) bottom (1.1) and then you get the two arrows (1.2)
9 can you=
10 S2: =below the. (0.5) mm, below the cross (0.7)
11 S1: on top of the cross (0.2)
12 S2: on top of cross
13 S1: yeah and then kinda like (0.2) uhm (.) curving (2.1) they not straight (0.4)
14 S2: oka[y Ill Ill make arrows go straight]
15 S1: [so they kinda curve (.) and <u>then</u>] they point out (0.8) to a dog (0.4)
16 S2: okay (0.2)

This extract begins with S1 describing a cross-like object next to a toilet. This utterance closes the previous interactional agenda (i.e., drawing a toilet), and initiates the establishment of a new agenda (N.B. the uneven distribution of information in this task gives the keeper of more information greater ability in both starting and closing interactional agendas). In line 2, S2 acknowledges this shift, and S1 proceeds to establish the new agenda in line 3 (i.e., drawing a cross). The turns taken by S2 in lines 7, 10, 12,

and 14, all conform to the identification of the cross. Accordingly, each subsequent turn by the keeper of less information is aligned with the previously set forth agenda. By questioning the specific location of the cross, S2 is in effect representing the asymmetrical distribution of information. The process of this type of information gap is, once again, reflexively manifested in the basic turn-taking procedure of Task 3.

The last task used in this thesis is Task 5. The participatory structure of Task 5 is a two-way information gap. It can be recalled that two-way information gap tasks are more flexible in who establishes and maintains the interactional agenda (cf. one-way information gap tasks). The current section will provide further examples of how this flexibility is manifested in turn-taking rights. Task 5 required both task-takers to read a syntactically challenging sentence; they were then asked to answer three questions pertaining to the sentence. In other words, both task-takers have an equal amount of information that is required to complete the task. As the following extracts will show, the participatory structure of two-way information gap tasks provides a turn-taking flexibility that is not readily available in one-way information gap tasks. That is to say, both task-takers in two-way information gap tasks have an equal chance at bidding and maintaining the interactional agenda. This will be shown in the following extracts.

Extract 18: Dyad 7 – Task 5

1 S1: who did the dog bark at? (2.3)
2 S2: it barked↑ at. (0.6) chased died (0.3) hehehe (0.6) ·hhh °bark at (.) chase° (0.3) the
3 sentence say that chased died (3.4)
4 S1: <u>alright</u> (0.4) I think the mouse (1.3) °the mouse the cat the dog barked at (2.5) at
5 (1.0) chased died° (8.5) >who did the dog bak at?> (1.4)
6 S2: no idea (2.3)
7 S1: he.hh.hh (0.6) the mou.hh.se (0.2) because (2.1) can you explain it (.) because the
8 mouse? (0.3) the cat the dog barked at (1.0) ch,- (1.0) chased died (0.9) °the
9 mouse the cat the dog barked at° ((task continues))

In Extract 18, both task-takers have read the target sentence and are in the beginning stages of discussing each question. In line 1, S1 establishes the interactional agenda by setting forth the first question. His fellow interlocutor attempts to answer the question in

line 2 ('it barked at...chased died'), but begins to laugh and comment on the convoluted nature of the sentence. Although this first question and answer adjacency pair is initiated by S1, the participatory structure of this task gives both task-takers an equal stake at establishing the interactional agenda. Put in another way, the requirement to read and answer each question in Task 5 is a reciprocal demand. This is evident in lines 4 and 5, where after S1 provides his initial statement ('I think the mouse'), he reestablishes the interaction agenda ('who did the dog bark at?). The question and answer adjacency pair is completed in line 6, when S2 emphasizes his nonunderstanding. By providing another assessment of the sentence ('the mouse because...'), S1 maintains the interactional agenda. As a result, after one task-taker establishes the interactional agenda, both task-takers maintain the agenda until a new one is introduced. Extract 19 provides an additional example.

Extract 19: Dyad 9 – Task 5

1 S1: who.hh d.hh.id the dog bark at (1.0) can you explain your weason (5.0)
2 S2: no idea hehe.hh·hh (0.3)
3 S1: uh:: (9.4) ·hh I think the dog (3.6) wa::s. (0.2) barking at the cat (2.0)
4 S2: the cat was chasing after. (1.1) the mouse (0.9)
5 S1: yes. (.)
6 S2: hh·hh.he (0.6)
7 S1: can you explain why (.) cuz (0.3) the dog (1.7) hate (0.7) hate (0.5) hate (0.4) cat

This extract begins with S1 posing the first set of questions, and therefore establishing the interactional agenda. In line 2, S2 maintains the interactional agenda by offering her nonunderstanding of the question. S1 then provides her opinion of the sentence in line 3 ('I think the dog was barking at the cat'). Lines 2 and 3 consequently represent the maintenance of the first interactional agenda. A new interactional agenda is established by S2 when she attempts to answer the second question. In line 5, S1 concurs with the previous assessment, (i.e., maintains the second interactional agenda), and continues to answer the second part of the first set of questions in line 7 (i.e., reestablishes the first interactional agenda). This interdependency to negotiate and maintain the interactional

agenda is characteristic of two-way information gap tasks. Accordingly, this type of turn-taking mechanic is clearly more dynamic than the one-way information gap tasks discussed in previous extracts.

Sections 5.1.1 and 5.1.2 have illustrated how the participatory structure of tasks affect the way task-takers manage their turns. Specifically, the distribution of referential information dictates who can initiate and maintain an interactional agenda; the interactional agenda being the process of completing a task. However, despite the influence participatory structures (task-as-workplan) have on turn-taking (task-in-process), the 'process of completing a task' varies considerably. The following section will demonstrate how, despite the fairly stable relationship between participatory structures and turn-taking, task-takers will complete tasks in varying degrees and ways.

5.1.3 Variability in task-in-process

The first example demonstrating variability in task-in-process will compare how two different dyads completing an identical interactional agenda within the same task (navigating through the same landmarks) interact in much different ways. Whereas in the previous sections it was shown that keepers of less information are limited in their ability to initiate and maintain turns, when problems in referential information manifest they are in fact responsible for making such problems conditionally relevant. In the following extract, both task-takers are completing Task 4 (one-way information gap). The route holder in this extract is S2, whereas S1 is the route follower. The referential problem in this extract is the duck landmark.

Extract 20: Dyad 5 – Task 4

1 S2: and then line just (0.8) cross (0.4) uh: middle of them
2 S1: uh middle of the two men=
3 S2: =yeah the same yeah the same between them=
4 S1: =uh-ah-ok yes
5 S2: and then you see a duck (1.6) [[duck]]
6 S1: [[duck]] a dog?
7 S2: a- (0.9) <u>duck</u> (0.5) duck (1.0)

8 S1: °<what is that<°
9 S2: a duck (1.3) a duck?
10 S1: I couldnt see any duck. (0.3) I see: ju:st
11 S2: uh oh↑:↓:↑ (0.9) o:ka.hh.y·hh
12 S1: u::m:=
13 S2: =a there is a duck (0.6) but (0.3) not not whether (0.5) you just draw the line (0.7)
14 S1: °m[m hm°]
15 S2: [keep] drawing the line (0.2) down,
16 S1: mm hm? (0.8)
17 S2: and then: (0.4)

On the route holder's map, there is a duck below two men; conversely, on the route follower's map, there is no duck below the two men. In lines 1-4, both task-takers successfully navigate through the two men landmark. However, after the keeper of more information establishes the next interactional agenda in line 5 ('and then you see a duck'), both task-takers repair after a noticeably long pause (N.B. the long pause in this case signals that there is trouble; see Schegloff *et al.* 1977). This simultaneous interjection or repair is immediately followed by an other repair initiator by the keeper of less information ('a dog?'). In line 7, S2 self-repairs twice ('duck…duck'), and the ensuing interactional work is devoted to fixing this referential problem (lines 8-15). Before discussing the implications of this extract, it is important to introduce a contrasting example.

In Extract 21, both task-takers are completing the same interactional agenda within the same task. However, in this case the duck landmark does not receive the same amount of interactional attention. Here, the route holder is S1, and the route follower is S2.

Extract 21: Dyad 1 – Task 4

1 S1: uh:::: (1.2) there is going up (.) to::: (.) the (.) upper↑
2 S2: yeah (0.9)
3 S1: a:n: (1.3) there is: (0.9) go:ing: to b:etween::: (0.3) two mens (0.8)
4 S2: °o: (.) kay° (1.3)
5 S1: between two men an: there is go:ing: to: (3.2) u:: right hand si:de of the duck (2.9)
6 uh:m:: it is go::i- (1.2) to:: (1.0) °what is it° (0.6) left hand side of the car (1.5)
7 S2: car?
8 S1: eh huh=
9 S2: =oh:: (3.2)
10 S1: and it is (0.4) um:: its (.) up, to:::: the: snowman> (1.4)

11 S2: snowman

This extract starts with both task-takers positioning themselves before the two men landmark. In line 3, the keeper of more information establishes the two men landmark, and after the keeper of less information acknowledges the new information in line 4 ('okay'), the keeper of more information continues navigating through the duck, car, and snowman landmarks (lines 5-11). Whereas in Extract 20 when both task-takers use eleven lines of interaction to negotiate the duck landmark, the task-takers in this extract drift through the duck landmark as if there was no referential problem. It is indeed not a referential problem if task-takers manage to successfully complete the task without reference to landmark deviations (see Seedhouse 1999a for an account of indexical task-talk).

More importantly, because the keeper of more information does not know that the keeper of less information is missing the duck landmark on her map, it is the keeper of less information who must decide on what referential problem is interactionally relevant for repair (i.e., in one-way information gap tasks, the keeper of less information is the primary repair initiator for problems of referential information). Therefore, this uneven distribution of information, by way of participatory structures, can affect both turn-taking and repair. Because task-takers vary in their proficiency levels, background knowledge, and understanding of their fellow interlocutor, just to name a few examples, it should come as no surprise that task-in-process is a variable and dynamic endeavor.

As Kumaravadivelu (1991) and others (e.g., Breen 1989; Ellis 2003) have noted, task-takers have the opportunity to deviate from task objectives. In this example task-takers employ varying degrees of effort to repair problems in referential information. It can be expected then that task-in-process, though consistently influenced by task-as-workplan

(e.g., participatory structures and turn-taking), will sometimes deviate from its original plan (Breen 1987).

Extracts 20 and 21 have demonstrated how turn-taking and repair are indexical in that task-takers have their own idiosyncratic ways to carry out tasks (see Slimani-Rolls 2005). In other words, task-in-process is reflexively tied to the context in which it occurs. This is evident in the variability that exists in the way task-takers complete tasks. Extracts 22 and 23 will provide further support to the notion that task-in-process is variable and dynamic. In the following extract, both task-takers are completing Task 3. S1 is the picture describer and S2 is the picture drawer (the keeper of more information, and the keep of less information, respectively). As the previous series of extracts have shown, the communicative onus to identify disparities in referential information is on the keeper of less information.

Extract 22: Dyad 2 – Task 3a

1 S1: draw:: two arrows on your left hand side of the you know (.) draw two arrows
2 um: (0.2) which are pointing at the dog (0.6) two arrows (0.6) y- two arrows (0.7)
3 from the bottom of t- the oval (0.6) you know draw: (0.5) two arrows
4 S2: arrows, (.) what do you mean (0.2) arrows=
5 S1: =arrows (0.5) arrows (0.9) arrows (0.2) A-double R-O-W ((spelling the word))
6 (0.9) arrows (0.5)
7 S2: arrows? (0.4)
8 S1: arrows (0.6) arrows (1.2) arrows
9 S2: two arrows
10 S1: yeah two arrows=
11 S2: =like this? (1.6)
12 S1: n- (0.2) no no no (1.1) a- (1.6) how to say it (1.1) we um: (0.2) we are permitted
13 to: um: (0.7) to accept any gestures or (.) a[ny]
14 S2: [hh.haha]ha yeah ha.hh
15 S1: body signa[ls]
16 S2: [·hh]hh uh huh=
17 S1: =you just draw two arrows (0.5) arrows (1.1)
18 S2: arrows? a[-]
19 S1: [arrows]
20 S2: arrows as in we dont know like mistake (1.1)
21 S1: no not not erro.hh.rs ·hhh (0.9) that that uh: (.) e[- t]- that uh errors not (0.4)
22 this one (.) arrows (0.6)
23 S2: [errer]
24 S2: arro[w]
25 S1: [ar]rows (0.3)

26 S2: arrow (0.4)
27 S1: arrow (0.7) [[arrow:]]
28 S2: [[arrow]] (0.5) like uh:: (1.2) uh:m (0.3) a point or like a[:]
29 S1: [y]eah yeah
30 (0.6)
31 S2: oh: (0.5) like this? (1.4)
32 S1: ah jus- forg-e- bou- it

The extract begins with S1 describing a set of arrows. This referential description establishes the interaction agenda. In line 4, S2, the keeper of less information, immediately initiates two repair sequences (the 'what do you mean…arrows' repair initiation is an upgraded version of the previous repetition). These utterances make the referential problem conditionally relevant. S1 then repeats arrows three times, each time failing to solve the referential problem. In the same line, S1 unsuccessfully upgrades her attempt to repair the referential problem (this is followed by another downgraded repetition repair). The extract continues to go back and forth, with each task-taker employing a series of communicative moves to overcome the referential problem.

At this point it is easy to see how the keeper of more information establishes the interaction agenda, while the turns taken by the keeper of less information are in constant alignment. As with all one-way information gap tasks, the keeper of less information has the communicative onus to make any referential problems conditionally relevant (i.e., initiate repair). Because it is the keeper of less information that must identify referential points (i.e., draw the picture), each repair initiation can also be seen as maintaining but not establishing the interactional agenda.

However, this extract clearly shows that overcoming referential problems is a joint endeavor. For instance, for twenty-eight lines of interaction, both task-takers attempt to overcome the referential problem. Although the keeper of more information has the leverage to establish new interactional agendas, by seeking confirmation of referential points (e.g., initiating repairs), it is the keeper of less information that maintains the

interactional agenda (i.e., demonstrates that a problem still exists). Specifically, while much of the responsibility to display nonunderstanding in one-way information gap tasks is on the keeper of less information, resolving nonunderstanding is not only the ability of the keeper of more information to provide alternative accounts, but also the linguistic capacity of the keeper of less information to comprehend such accounts (N.B. this extract also demonstrates that the quantity of repair episodes that occur in a stretch of task-talk does not necessarily equate to the quality of interaction; more to be said on this issue in Section 5.2). Support for this claim will be offered by providing a contrasting example. In the following extract, both task-takers are completing the same interactional agenda within the same task. Here S1 is the picture describer and S2 is the picture drawer.

Extract 23: Dyad 3 – Task 3b

1 S1: and two flashes (0.4) two arrows (1.0)
2 S2: °two arrows°=
3 S1: =pointing (2.6) a dog is it (1.1) and going towards (0.5) the dog (1.2)
4 S2: ri::ght,okay (1.5)

As in Extract 22, the keeper of more information begins by describing a set of arrows. The referential point is then silently repeated in line 2 (indicated by degree signs). This silent repetition may signal nonunderstanding, but making this claim without video data would be speculative (e.g., absence of facial expressions). This utterance does, however, both confirm and align with the interactional agenda. In line 3, it is difficult to say what facilitative role S1's contiguous utterance ('pointing') and description of what object is near the arrows provides, yet the upgraded account certainly resolves any possible nonunderstanding that may have existed. This is evident in line 4, where S2 acknowledges the referential information. Thus, the interactional agenda (or referential point) is closed by these acknowledgement tokens. When this extract is juxtaposed with the previous, it is easy to see how the task-takers of Extract 23 are more successful in minimizing communicative difficulties resulting from mutual nonunderstanding (i.e., S1's

upgraded account in line 3 is successful in providing S2 with enough information to move on to the next interactional agenda). The varying degrees of success in Extracts 22 and 23 demonstrate the necessity to not only consider task-as-workplan (e.g., creating referential deviations for task-takers to repair), but also task-in-process (e.g., if task-takers actually make such referential deviations conditionally relevant). Doing so will both ascertain the construct validity of tasks and ensure sufficient attention is given to the process of completing tasks.

What the previous extracts have illustrated is that, while participatory structures have a constant influence on turn-taking mechanics and repairs, task-takers are individuals with unique background knowledge and idiosyncratic ways to carry out tasks. As a result, task-in-process is variable and dynamic. This will be further highlighted by contrasting two more sets of extracts.

This time the variation in task-in-process will be shown to occur on a more conceptual, macro level (cf. the micro-analytic account of Extracts 20-23). For example, in the following set of extracts, different dyads can be seen as employing varying degrees of effort to complete the same task. The task-takers in the following extracts are completing Task 1. It can be recalled that this task required both task-takers to identify two similar and dissimilar characteristics (two-way information gap). Yet this task required another task-as-workplan objective (see Chapter 4). That is, this task was the first to be completed by task-takers, and therefore contained a 'get to know your partner' element. The variation in task-in-process can be seen as the effort task-takers put forth in either completing the task according to a 'path of least resistance' (i.e., some task-takers choose to simply identify and move on to the next characteristic; see Extract 24), or completing the task with a genuine attempt to 'get to know each other' (see Extract 25).

Extract 24: Dyad 4 – Task 1
1 S1: uh:m ((name omitted)) from China (0.5) and majored in:: cross cultural

2 communication (1.4)
3 S2: uh::m: (0.7) ((name omitted)) also from China (0.6) my major is uh: applied
4 linguist and TESOL (0.8) hh.heheha (0.3) I sta:rted to task one (0.9) uh:: (12.6)
5 uh: first simil- (0.3) dissimilarities between us is, (0.5) should be: (4.8) you were,
6 (0.3) you female (0.4) and Im male (0.3) right (0.4)
7 S1: yeah (2.7) and from different places of China (2.9)
8 S2: uhm (0.7) male (1.6) youre female (18.4) and (11.5) mm:: ((task continues))

After both task-takers provide short introductions in lines 1-4, S2 begins the task by attempting to identify the first set of similar and dissimilar characteristics ('…first similarity…dissimilarity between us is…'). In line 6, this utterance continues with the first dissimilar characteristic ('you female…and I'm male…right'). The subsequent utterance in line 7 acknowledges the first identification ('yeah'), and continues to establish the next dissimilar characteristic ('…and from different places of China'). In line 8, S2 recapitulates the first characteristic and continues to move on to a new set of characteristics. Relatively long pauses ensue, indicating that both task-takers are experiencing some difficulty in identifying characteristics. However, it appears that the focal point of attention is on quickly and successfully establishing each characteristic (i.e., 'path of least resistance'). This is demonstrated by the fact that each contribution is brief, with no attempt to elaborate or extend on established characteristics (which is part and parcel of two-way gaps). Before discussing the implications of this extract, a contrasting example will be given to highlight the difference.

In the following extract, both task-takers can also be seen as successfully establishing characteristics. Yet, there is also a more genuine attempt to get acquainted (Svennevig 1999). That is to say, the extensions and elaborations employed in the following extract go beyond the interactional work that is achieved by simply identifying similar and dissimilar characteristics.

Extract 25: Dyad 8 – Task 1
1 S1: you start first (0.7)
2 S2: °ok°, (1.0) hehh::hehe·hh (0.3) whats your favorite color (.) I like (1.8) blue:: (1.3)
3 >white> (1.1)

4 S1: my favorite color is white (0.5) but not blue (3.6) hey but happening that (0.7)
5 uhm (0.8) your balance is (0.5) in, (0.6) yellow? like me (0.2)
6 S2: hh.he=
7 S1: =so, (1.2) white and yellow (0.7) yellow is not your favorite color (1.9)
8 S2: <hmm< actually, (1.2) no, but (0.4) it. (0.6) somebody told me that yellow is (0.8)
9 a color of. (0.3) rich↑ people (.) haha[ha]
10 S1: [ahhh] ok
11 S2: fortune
12 S1: hehe[he]
13 S2: [lit]erally (0.9) hm (0.3) fortune (0.2) thats why=
14 S1: =so we are rich (0.4)
15 S2: we are

After S1 determines that S2 will be the first to establish the interactional agenda ('you start first'), S2 accepts the responsibility by asking S1 what her favorite color is. Before S1 responds to the previous question, S2 offers a set of her own favorite colors ('blue…white'). In line 4, S1 identifies a similarity ('my favorite color is white…') and dissimilarity ('…but not blue'). Instead of moving on to a new characteristic (cf. Extract 24), S1 maintains the interactional agenda with a new color to consider ('…your balance is in yellow like me'). After S1 identifies her two favorite colors in line 7 ('white and yellow'), she attempts to determine if the color yellow is also a shared similarity ('yellow is not your favorite color'). In line 8, S2 rejects the color, but provides additional anecdotal information vis-à-vis the color yellow ('a color of rich people').

This brief anecdote acts as an extension to the interactional agenda that was missing in the previous extract. Moreover, once both task-takers establish that yellow is a color of fortune (lines 9-14), S1 states that they are both rich people, and S2 accepts the generalization ('we are'). On a more conceptual level, there appears to be less urgency involved in the exchanges of this extract. Again, this is demonstrated by the elaborations and extensions that are employed within most turns. Accordingly, Extracts 24 and 25 illustrate how task-takers' understanding of task-as-workplan objectives (e.g., the identifying characteristics objective, or the-get-to-know-your-partner objective) can cause task-in-process to vary.

A final set of extracts will be introduced to provide additional examples of how task-in-process is variable and dynamic. This will be done by showing how task-takers' understanding of their interactive roles can alter participatory structures. As can be expected, this will retransform turn-taking mechanics (see Section 5.1.1). Whereas the previous extracts have juxtaposed contrasting examples with different dyads, the following extracts will compare two extracts of one task completed by the same dyad. This will help illustrate how the interactive roles adopted by task-takers can alter even the most fundamental element of a task.

In the following extracts, both task-takers are completing Task 5. It can be recalled that Task 5 required both task-takers to share the same referential information in order to co-construct a syntactic understanding of a sentence. Therefore, Task 5 is a two-way information gap. Because of this, both task-takers are jointly responsible for establishing and maintaining the interactional agenda. However, some task-takers assume expert or novice roles, thus subjugating themselves to an uneven distribution of referential information (e.g., the expert maintains the keeper of more information role because it is mutually or independently assumed that he or she possesses more knowledge). Specifically, whereas some task-takers see the shared information (convoluted sentence) as a joint responsibility (see Extracts 18 and 19), others interpret the same information as an opportunity to demonstrate a superior knowledge (see Extract 26). By assuming expert or novice roles within two-way information gap tasks, the ensuing turn-taking mechanics will deviate. This deviation begins in Extract 26.

Extract 26: Dyad 4 – Task 5

1 S2: okay my anwer (0.4) my answer is (0.7) uh: the dog barked at (0.9) the cat (1.0)
2 uh: the cat (0.7) uh: the mouse was chased (0.8) an:d (0.4)
3 S1: hh.hehe the c.hh.at di.hh.ed ·hh.hehe=
4 S2: =no n[o t]he mouse died (0.4)
5 S1: [hehe·hh]
6 S2: the mouse died (0.9) does are my answers (1.2)
7 S1: I think the mouse uh:m, (.) died because of the cat (0.4) and the dog (0.7) barked

8 at the cat (0.7) maybe: the dog (0.6) uh barked because the cat is (0.7) chasing the
9 mouse (3.1)
10 S2: no, (10.2) if you: (0.6) anal- (0.2) analyze (0.3) this sentence (0.5) in terms, of
11 (0.7) grammar (0.4) you can see (3.0) my ex- explanation (0.8) is that? (0.8) mm::
12 (.) the mouse (0.3) died (0.7) and the cat is (0.3) uh the mouse is the one (0.8) the
13 cat chased (0.8) the cat is the one the dog barked at (0.6) and the mouse died (2.5)
14 S1: I think the fact it is the mouse (.) and the the cat the dog barked is something to:
15 (0.5) uh:n: n- describe the mouse (0.9) and then (0.6) mm the mouse died (0.6) is
16 the result (1.1) do you think so (1.8)
17 S2: its a complete sentence you know (0.4) its a complete sentence (0.3) its a sentence
18 its direct sentence (1.0) uh y- you=
19 S1: =yeah (0.5)
20 S2: you should pronounce (0.9) a: linguistic point (0.4) point of view (1.6) to: (0.2)
21 expl- (.) to explain the sentence (0.4) how (0.9) the sentence (2.6) was (1.6)

In line 1, S2 establishes the interactional agenda by providing his answers to the three questions. After S2 provides two of the three answers ('the dog barked at the cat' and 'the mouse was chased'), S1 promptly interjects the answer to the third question in line 3 ('the cat died'). This interjection can be seen as maintaining the previously set forth interactional agenda (i.e., the interjection is topically relevant), yet it is not inline with what S2 had originally conceptualized. This is evident in lines 4 and 6, where S2 provides a different third answer. Then in lines 7-9, S1 provides her own set of answers and justifications. Up until this point both task-takers in this extract have established their standpoints. That is, they are both following the basic turn-taking mechanics established in previous Task 5 examples (see Extracts 18 and 19). Specifically, both task-takers have equally contributed to this task by providing their own assessment of the shared information (which is part and parcel of two-way information gaps).

However, whereas both task-takers would have typically moved on to a new interactional agenda, S2 self-nominates himself as the expert when he disagrees with S1's previous assessment, and subsequently provides an appropriate mode of analysis. It is interesting to note that S1's standpoint in lines 7-9 are identical with S2's retort in lines 10-13 (i.e., both agree that the dog is barking at the cat, the cat is chasing the mouse, and

the mouse died). Yet S2 insists S1 provide a different set of justifications for her answers ('if you analyze this sentence in terms of grammar').

In lines 14-16, S1 reiterates her viewpoint and seeks reconfirmation. S2 then continues with his expert role by summarizing the sentence structure in lines 17-18 ('it's a complete sentence…direct sentence'), and instructing S1 to adopt a linguistic analysis to justify her claims ('you should pronounce a linguistic point of view to explain the sentence'). A few lines later, S1 does in fact adopt a more grammatical mode of analysis.

Extract 27: Dyad 4 – Task 5

24 S1: mm (.) the fact is is the mouse (0.5) and the ver[b]
25 S2: [the] subject> (0.2) yeah is the
26 mouse
27 S1: the verb is=
28 S2: =the verb is d[ied] (0.4) died y[eah] (0.6)
29 S1: [died] [yeah]

Extract 27 clearly demonstrates a shift in S1's mode of analysis. Here specific syntactic correlations are made between the interactional agenda (e.g., what animal died?) and grammatical components (e.g., the verb). Accordingly, the export role taken by S2 reestablishes and redirects the interactional agenda by instituting a specific analytical framework that should be followed (i.e., linguistic/grammatical analysis). In effect, the contributions in this latter extract are represented by an uneven distribution of information. That is, S1 is now contributing to the completion of the task by using information that was not previously shared (i.e., the 'appropriate' way of analyzing the sentence according to the expert). This turn-taking procedure is much different than those found in previous two-way information/opinion gap tasks.

More importantly, although participatory structures have a strong influence on turn-taking and repair, it is task-takers' understanding of tasks and their roles within them that ultimately shape task-in-process. The following section will summarize this interplay within the literature framed in Chapter 2.

5.1.4 Summary

What interactional influence does a task-as-workplan have on a task-in-process? As Chapter 2 has stated on numerous occasions, task-as-workplan consists of the task dimensions that have been conceptualized before implementing a task (Breen 1987). Whether any of these dimensions are borne out in analysis is a matter of construct validity (Zeller 1988). Whereas Chapter 2 has identified the concepts central to task-based interaction (step one of three to construct validation; see Section 2.2), this section has identified how participatory structures are borne out in task-in-process. The interactive properties that have been investigated within task-in-process are turn-taking mechanics (and repair). It was later shown that although participatory structures have a constant influence on task-in-process (see Sections 5.1.1 and 5.1.2), variability will occur as a result of task-takers' idiosyncratic ways of carrying out tasks (see Section 5.1.3). As a result, the findings discussed in Section 5.1 satisfy step two of construct validation. That is, "...the empirical relationship between the measures of the concepts must be examined" (Zeller and Carmines 1980, p. 81).

Instead of investigating specific task-based hypotheses (e.g., tasks encourage task-takers to NfM), this section has taken a more bottom-up approach to construct validation. That is to say, this section first analyzed task-based interaction for any potential points of interest (Hutchby & Wooffitt 1998). The analysis then accounted for any interactive trends that may have been a result of task-as-workplan. In regard to the turn-taking procedures of tasks, only the participatory structure of tasks was shown to provide a consistent influence over task-in-process. Examples include one-way information gap tasks and two-way opinion gap tasks. However, the predictability of task-in-process is dependent on task-takers' understanding and interpretation of task-as-workplan. It was shown that this was the primary catalyst for task-in-process variation.

With these findings in mind, it can be said that there is a reflexive relationship between the participatory structure of tasks and turn-taking mechanics and repair (see Seedhouse 2004, for a similar L2 classroom claim). As the distribution of information changes, so too does the ability to establish and maintain the floor. For instance, it was shown in Extracts 11, 16, 17, and 20-23, that the asymmetrical distribution of information in one-way information gap tasks limits the ability of the keeper of less information to open and maintain the interactional agenda. Conversely, the keepers of more information in one-way information gap tasks have less control over closing interactional agendas (and initiating repairs for problems in referential information).

Two-way information gap tasks have more interactive flexibility. Because both task-takers have an equal distribution of information, establishing and maintaining the interactional agenda is accomplished through bids (see Extracts 12, 13, 18, 19, and 24-27). Although both task-takers have an equal stake at the turns taken in tasks, bidding for the floor is more interactively competitive in this type of task.

The turn-taking procedures for two-way opinion gap tasks occur in the same manner as two-way information gap tasks (see Extracts 14 and 15). That is, both task-takers have the ability to establish, maintain, and close, the interactional agenda. Therefore, bidding for the floor in two-way opinion gap tasks is more open to negotiation than one-way information gap tasks.

Consequently, it can be said that the distribution of information (e.g., one-way versus two-way) has more influence over the turn-taking mechanics of tasks than the topic of orientation (e.g., opinion/subjective versus information/objective). This is evident in the turn-taking similarities found in two-way opinion and two-way information gap tasks. For instance, though the topic orientation and discourse found in opinion and information gap tasks are fundamentally different (exchanging ideas and referentially focused

information, respectively), the turn-taking procedures follow the same suit. In other words, the participatory structure of tasks is essential to the organization and sequence of turn-taking.

As far as the construct validity of tasks is concerned, the empirical relationship between task-as-workplan and task-in-process has been identified in the previous sections as the relationship between participatory structures, and turn-taking and repair. The significance of accounting for the variability in task-in-process is the ability to identify both static and dynamic task-based interaction variables. In other words, to see if a task does what it is claimed to do. For example, the participatory structure of tasks is a fairly static variable. The interaction occurring as a result of this variable results in a particular turn-taking mechanic. However, within this turn-taking mechanic, the sequence and form of talk will vary according to task-takers' referential alignment to task-as-workplan. Consequently, although the participatory structure of tasks creates a fairly predictable turn-taking mechanic, the actual interaction occurring in task-in-process is variable and dynamic.

Yet, focusing exclusively on task-in-process also provides an incomplete picture of task-based interaction. That is, although it is important to account for what task-takers do during task-in-process, it is equally as important to relate this to the dimensions and objectives of tasks (see Breen's 1989 notion of task outcomes). Because tasks vary in dimensions (e.g., participatory structure) and objectives (e.g., referential problems), the ensuing task-in-process will vary accordingly. Put in another way, ensuring construct validity means not only understanding how task-as-workplan influences task-in-process, but also how task-in-process interacts with task-as-workplan. From a methodological point of view, etic and emic perspectives of tasks must be reconciled (Seedhouse 2005).

It can then be said that ensuring a task's construct validity is to account for the two perspectives inherent in all task-based interaction (Breen 1987). While it is important to identify any task-as-workplan variable that may influence task-in-process (e.g., participatory structure of tasks), it is equally if not more important to investigate why deviations occur in task-in-process (Duff 1993). That is, identifying the interactionally influential properties of a task, and how they are manifested in task-based interaction, is not only central to the construct validity of tasks (see Section 2.2), but also for pedagogical objectives (e.g., Bygate 2001 investigates how a repetition task variable influences oral production). For instance, Extract 3 in Chapter 3 demonstrated how task-takers' willingness to efficiently and effectively carry out a task's objectives may cause considerable task-in-process variation (cf. Extract 4). Though the turn-taking mechanics of Extracts 3 and 4 follow the same suit, their talk is different, both quantitatively and qualitatively. This is why the notion of indexicality is an important variable in task-based interaction studies. The locally situated meanings that arise from task-takers' understanding of task-as-workplan is central to examining if tasks do what they are claimed to do. Understanding the variable and dynamic ways task-takers talk is consequently an issue of construct validity.

This section has identified the relationship between participatory structures and turn-taking, discussed why task-in-process deviations may occur, and related the issue of construct validity to the variable and dynamic ways task-takers carry out tasks. These issues have been discussed under the realm of turn-taking mechanics. The next section will go into more detail, and discuss whether tasks encourage task-takers to repair (or NfM).

5.2 Do Tasks Encourage Task-Takers to Repair?

Before analyzing the data for this section, it is important to reestablish the terms used for analysis. In Section 3.2.3, a distinction was made between correction and repair. Correction was said to be related to correcting an error, whereas repair was associated with overcoming any communicative trouble (e.g., misunderstandings or hesitations). A third distinction can be made with the NfM term. It was claimed in Chapter 2 that many task-based interaction studies are centrally concerned with whether tasks encourage task-takers to NfM. The reason being that the NfM is thought to be conducive to L2 development. Examples of NfM include terms such as comprehension checks, clarification requests, and confirmation checks (see Section 2.5.1). As a result, three general categories of negotiation exist (i.e., correction, repair, and NfM). However, it was demonstrated through the extracts and examples used in Chapter 3 that the term repair is more interactionally encompassing than correction and NfM. For this reason, repair will be used for the analysis of this section, though the terms correction and NfM will be discussed when relevant.

As just mentioned, many task-based interaction studies are centrally concerned with the NfM (Ellis 2003). In regard to task perspectives, most of these studies are taken strictly from a task-as-workplan standpoint (see Section 2.5 and Seedhouse 2005). That is to say, any occurrences of repair are thought to be a direct result of task-as-workplan (e.g., Pica *et al.* 1993; Gass & Varonis 1985). The point of departure for the analysis of this section is to first analyze occurrences of repair, and to subsequently account for any interactive trends that may be a result of task-as-workplan. This can be seen as starting from a task-in-process perspective, while taking into consideration the significance of a task-as-workplan. However, the analysis that follows will not examine the different type and sequence of repairs in task-based interaction. This mode of analysis is reserved for Section 5.3. What the following sections will do (in much the same way as Section 5.1)

is account for any static and dynamic task variables that may encourage task-takers to repair.

5.2.1 Two types of trouble source: Referential and task-taker

In order to determine if tasks encourage task-takers to repair, it is crucial that the subsequent analysis identify why a repair has occurred. This is done by identifying the trouble source. If task-takers repair because of lack of proficiency or mispronunciation, for example, the repair should not be considered as a direct result of some task dimension. That is to say, the task has not encouraged task-takers to repair. This mode of analysis bears significance on the construct validity of tasks because differentiating between trouble sources will provide for a finer-grain analysis of tasks and their influence on repair.

The repairs occurring in the tasks used in this thesis appear to be induced from two different trouble sources. These two sources can be referentially induced (RI) or task-taker induced (TI). In previous research, the terms medium-oriented and message-oriented have been used, respectively (van Lier 1988). RI trouble sources occur as a result of some type of referential problem. TI trouble sources occur because there is some type of communicative difficulty, such as mispronunciations or hesitations. A third type of trouble source that focuses on a task's organization can be identified (activity-oriented; e.g., repairing task directions or objectives), but it will not be discussed in this section because these trouble sources will occur irrespective of task dimensions (see Section 5.3).

The following extract will provide an example of an RI trouble source. In Extract 28, both task-takers are approaching the final section of Task 4. It can be recalled that in Task 4, one task-taker is the route-describer and the other is the route-follower. Here, S2 is the route-describer and S1 is the route-follower.

Extract 28: Dyad 2 – Task 4

1 S2: on the (0.4) hm: (0.2) and it beneath the: (1.7) whats th.hh.is ·hh (0.3) basketball?

2 (0.4) oh no (.) no basketball (0.5) baseball (1.0)
3 S1: baseball I,tink
4 S2: ah↑ baseball thee yeah thank you (1.0) and (.) go to the finish, (0.6)

In line 1, S2 begins to lead S1 to the final landmark. As her route description nears the bottom of the referential point ('and it beneath the'), she self-initiates for repair after a noticeably long pause ('whats this…basketball?). This is indicated by the Wh-question with rising intonation. It should be noted that although the nearly two second pause in line 1 may indicate a sign of trouble, S1 is not in a position to complete the repair because she is the keeper of less information, and therefore does not know what the next referential point is (N.B. in this situation a repair initiation is possible).

After a short pause in line 2, S2 self-repairs her previous description ('no basketball…baseball'). Although S1 is the route follower, she also provides an additional repair in line 3 (N.B. now that the referential point has been established, the keeper of less information is in a position to repair). This referential problem is concluded when S2 acknowledges the previous repair ('ah…baseball…thank you'), and continues with the final referential point ('go to the finish').

It is easy to see how the repair sequence in Extract 28 is centrally concerned with fixing a referential problem. S2 initiates the first repair after she has difficulty pinpointing a landmark, while S1 provides additional feedback in regard to this referential issue. This extract has also illustrated how the participatory structure of tasks influences opportunities for repair. By not possessing information crucial to the successful completion of a task, the keeper of less information in one-way information gap tasks has an interactionally limited role. It should be noted that this limitation is only relevant in RI trouble sources (see Section 5.1). This limitation is to some extent lifted once the interactional agenda (or referential point) has been shared.

The next extract will illustrate an example of a TI trouble source. In Extract 29, both task-takers are completing Task 2. It can be recalled that the participatory structure of this task is a two-way opinion gap. The extract begins after S2 has spoken for several lines concerning the second controversial statement.

Extract 29: Dyad 4 – Task 2

1 S2: and the second meaning is that (0.5) women (3.1) uh the second meaning is that
2 (0.4) a women (0.4) a woman (1.4) now (0.3) is at home (1.0) is a[t home] (0.5)
3 S1: [no]

In line 1, S2 is nearing the end of his conclusion to controversial statement two. As S2 begins to finalize his statement in line 2, he utters a morphologically incorrect phrase ('a women'), which is almost immediately followed by a self-initiation self-repair ('a woman'). This is a clear example of how a repair can manifest from a task-taker communicative problem (TI trouble source).

However, repairs can also occur as a result of both referential and task-taker communicative problems. In Extract 30, an RI and TI trouble source can be seen as inducing a repair. Both task-takers are completing Task 3. In this extract, S2 is the picture describer and S1 is the picture drawer.

Extract 30: Dyad 3 – Task 3a

1 S2: °yeah° (1.1) and uh: inside of square there is u- an oracle (0.8)
2 S1: oracle?
3 S2: °oracle?° (.) °is that oracle° that Im not sure but uh (0.3) the picture uhm (0.3) a
4 circle? (1.0) a circle but not so round (0.9)
5 S1: oval shape (0.6) li[ke e]gg (0.3)
6 S2: [yeah]

This extract begins with S2 describing the overall shape of the picture S1 is required to draw. After S2 completes her description in line 1, S1 immediately repeats the referential problem ('oracle'). This repetition with rising intonation acts as an other-initiation for repair. In line 3, S2 repeats the referential problem with rising intonation. This also signals that a referential problem exists. That is, S2 self-initiates for repair. The micro pause that follows gives both task-takers the opportunity to repair, but because S1 is the

keeper of less information (i.e., at this point does not know what the referential point is), her opportunity for repair is limited.

However, S1's opportunity for repair is realized after S2 provides a reassessment of the referential problem ('a circle but not so round'). This detailed description evenly distributes the necessary information to overcome this referential problem. This is evident in line 5, where S1 provides two other-initiated repairs ('oval shape…like egg'). The repair sequence is finally completed in line 6 when S2 accepts the new description. This extract shows how using an incorrect word to describe a referential point may cause an extended series of negotiation. More specifically, both the referential object and its respective description created a communication breakdown.

This section has introduced three trouble sources that occur in the task-based interaction corpus used in this thesis (i.e., RI, TI, and both). These trouble sources are indicators of repair opportunities. It was also re-highlighted that the participatory structure of tasks has some interactional role in repair sequences. From these initial findings, the following sections will analyze the different trouble sources that occur in the three types of participatory structures used in this thesis (i.e., one- and two-way information gap tasks, and two-way opinion gap tasks). This will help answer the question, "Do tasks encourage task-takers to repair?"

5.2.2 Opportunities for repair: two-way opinion gap tasks

This section will examine the trouble sources that occur in two-way opinion gap tasks. The purpose of this section is to determine whether the two-way opinion gap task used in this research encourages task-takers to repair. From a strictly RI trouble source point of view, the two-way opinion gap task used in this thesis does not provide many referential opportunities for repair. Because the controversial statements in Task 2 are not an object of study (cf. navigating around landmarks), but a reference point for discussion, there are

not many opportunities for task-takers to repair for referential problems. Furthermore, the participatory structure of this task gives task-takers the opportunity to engage in a more open style of discourse (cf. one-way information gap). Because much of the communicative onus is on maintaining fluent communication, it is no surprise that much of the repair work occurring in this two-way opinion gap task are employed to overcome TI trouble sources.

In fact, there are no repairs occurring as a result of RI trouble sources in any of the two-way opinion gap task extracts investigated in this thesis. Furthermore, almost all of the TI trouble sources in Task 2 are self-initiated self-repairs. The preference for self-initiated self-repairs in Task 2 is similar to those found in conversations occurring in more casual, social settings (Schegloff *et al.* 1977). This similarity may indicate that the task-takers of Task 2 interpret their task as a communicative device. The implication of this phenomenon will be discussed later. For now, extracts will be provided to demonstrate the relationship between two-way opinion gap tasks and TI trouble sources (N.B. in the interest of space, only two examples will be discussed).

Extract 31: Dyad 4 – Task 2

1 S2: <u>now</u> there is peace (1.1) and for (1.0) if you dont wanna wage a war (.) at any time
2 (0.8) there is always no war (.) no- (.) theres always peace (1.1)
3 S1: it just says for future peace (1.0) that means we should do something (0.6) uh:::
4 (0.7) or, (2.4) mm:: (1.1) just like no war to:: (1.1) to devent (.) uh to: (.) prevent
5 (0.5) uh: some ((task continues))

Extract 31 provides two examples of TI trouble sources occurring in the two-way opinion gap task (see Extract 29 for another example). In this case, both task-takers are discussing the 'war is necessary for future peace' statement. S2 begins this extract by expressing his viewpoint. In line 2, S2 begins a new statement ('there is always no war'). After a short micro pause, he realizes that he has not articulated himself correctly, and self-initiates a repair ('no'). Although the 'no' can be interpreted as the beginning stage of a repetition (i.e., the utterance following the 'no' is semantically the same as the one

preceding it), it is safer to interpret it as a self-initiation because it is difficult to determine whether S2 in fact repeated for emphasis or reformulation.

After another short micro pause, the repair sequence is finalized when S2 repairs his previous statement ('theres always peace'). It should be noted that both micro pauses (one before the self-initiation and the other before the self-repair) are transitions that also give S1 the opportunity to repair (Hutchby & Wooffitt 1998). Nevertheless, both opportunities are disregarded. Again, the fact that both task-takers have an opportunity to initiate and complete a repair demonstrates the influence participatory structures have on interaction (i.e., both are jointly responsible for initiating and maintaining the interactional agenda).

The second TI trouble source occurs in line 4. As S1 is expressing her viewpoints in lines 3 and 4, she stops momentarily to begin a new statement ('just like no war to'). After another pause S1 continues her statement, but with some communicative difficulty ('to devent'). It only takes a short micro pause for S1 to realize her mispronunciation. Near the end of line 4, after S1 self-initiates a repair ('uh to'), a short micro pause precedes her self-repair ('prevent'). Again, two micro pauses occur before the self-initiation and self-repair, giving the other task-taker the opportunity for repair (cf. where the ability to initiate and complete repairs is limited in one-way information gap tasks). As in the previous case, both opportunities are not realized.

In light of the main research question set forth in the beginning of Section 5.2, do two-way opinion gap tasks encourage task-takers to repair? Again, from a strictly referential (task-as-workplan) point of view, no, two-way opinion gap tasks do not provide task-takers with many opportunities to repair. As previously mentioned, because the controversial statements in this task are not an object of study (i.e., task-takers are not

analyzing the syntactic truthfulness of each statement), much of the repair occurring in Task 2, if any, will be employed to overcome some TI trouble source.

Because of this, knowing *a priori* whether two-way opinion gap tasks will provide an abundance of repairs is difficult, if not impossible. As task-takers' talk is reflexively tied to their understanding of task-as-workplan, and as a result, indexical in nature, any episodes of repair occurring in this type of task will be variable and dynamic. It is for this reason that two-way opinion gap tasks may not be suitable for researchers and teachers concerned with systematic occurrences of repair or negotiation. In summation, this two-way opinion gap task provides task-takers with few referential opportunities to repair, but encourages task-takers to participate in extended discourse (see Nakahama *et al.* 2001 for a similar conclusion regarding tasks that promote a more open style of discourse). The following section will now discuss opportunities for repair in one-way information gap tasks.

5.2.3 Opportunities for repair: one-way information gap tasks

This section will examine the trouble sources that occur in one-way information gap tasks. The purpose of this section is to determine whether the one-way information gap tasks used in this thesis encourage task-takers to repair. From a strictly RI trouble source point of view, the one-way information gap tasks used in this thesis do provide many opportunities for repair. However, the participatory structure of this task also influences who can initiate and complete repairs (see Extracts 28 and 30). More specifically, the keeper of less information in one-way information gap tasks does not have the same opportunities to repair referential information as the keeper of more information (though the former task-taker does have more opportunities to initiate repairs for referential information). This disparity in interactional rights is a result of the uneven distribution of information inherent in one-way information gap tasks (see Sections 5.1). To put it in

another way, if the keeper of less information does not have access to important task information, it then becomes extremely difficult to know what to repair.

Furthermore, it is the referential information in one-way information gap tasks that is the object of discussion (cf. opinion gap tasks). Much of the interactional work, and consequently repair, in this type of task is focused on negotiating referential issues (e.g., navigating a landmark or drawing an object). It is for this reason that most repairs occurring in one-way information gap tasks are as a result of RI trouble sources. Because the focus of discussion is on such referential issues, many of the TI trouble sources (e.g., mispronunciations and false starts) that are inherent in a more open style of discourse are unattended.

Extract 32 is a typical example of how RI trouble sources help activate repair sequences in one-way information gap tasks. Both task-takers are completing the blind drawing task. That is, one task-taker has a picture, and the other task-taker does not. In this case, S1 is the picture describer (the keeper of more information), and S2 is the picture drawer (the keeper of less information).

Extract 32: Dyad 1 – Task 3a

1 S1: =inside the square there is oval (1.1)
2 S2: °h[m°]
3 S1: [you] know what. e- (0.3) what oval is (1.1)
4 S2: O,
5 S1: o:::val
6 S2: ova (0.5) o[va]
7 S1: [o::]:val (0.4)
8 S2: whats ova (0.9)
9 S1: uh::: d-you uh:: do you know the shape of eggs, (1.1) eggs: (3.2)
10 S2: o[va]
11 S1: [eg]gs (0.7) E, G, G, (1.0)
12 S2: egg (0.6)
13 S1: eh [huh]
14 S2: [oh-ok]

This extract begins with S1 describing a square and oval. In line 2, S2 silently responds with an acknowledgement. Although this response does not explicitly

demonstrate nonunderstanding, it signals to S1 that there is some communicative trouble. This is evident in line 3, where S1 specifically asks S2 if she knows what an oval is. In an attempt to comprehend the object, S2 tries to repeat the word oval in line 4. S2 subsequently repairs the previously failed repetition, and in line 6, S2 reattempts to say the word oval. Again in line 7, S1 interjects S2's third repetition attempt with a repair. S2 finally upgrades her other-initiation for repair with an explicit question regarding the precise shape ('what oval'). In line 9, S1 also upgrades her self-repair with an analogy ('do you know the shape of eggs'). After S2 repeats the word oval in line 10, S1 repeats her upgraded description twice. The upgraded description is finally repeated by S2 in line 12, and a series of acknowledgements follow.

This extract has demonstrated how repairs occur as a result of an RI trouble source. It is important to note that this repair sequence, though centrally concerned with overcoming a referential problem, is also partly a result of task-taker idiosyncrasies. That is to say, though one-way information gap tasks provide many opportunities for task-takers to repair referential problems, it is task-takers who ultimately decide what opportunities to take (see Extracts 3 and 4). This is evident by the fact that there are no common referential problems that are consistently repaired by all or even some of the dyads in this thesis.

Furthermore, the participatory structure of one-way information gap tasks affect opportunities for repair. Though repairs for RI trouble sources are abundant in one-way information gap tasks, the initiator and repairer of the repair episode is governed by participatory structures. In Extract 33, for example, both task-takers are completing the map game task. It can be recalled that the keeper of more information is the route describer, while the keeper of less information is the route follower. In this extract, S2 is the route describer and S1 is the route follower.

Extract 33: Dyad 5 – Task 4

1 S2: and then you see a duck (1.6) [[duck]]
2 S1: [[duck]] a dog?
3 S2: a- (0.9) <u>duck</u> (0.5) duck (1.0)
4 S1: °what is that<°
5 S2: a duck (1.3) a duck? ((task continues))

Extract 33 begins with S2 establishing the next interactional agenda ('and then you see a duck'). What follows is a relatively long pause. This pause signals that there is some referential problem. This is evident by the subsequent and simultaneous repetition of the referential problem by both task-takers (indicated by the double brackets). The joint interjection is immediately followed by an other-initiation for repair by S1 ('a dog?'). Because S1 is the keeper of less information (i.e., does not know where the route goes), this initiation acts as a guess or an approximation of what landmarks are available on S2's map (N.B. there are two dogs on S1's map, but no duck). Like all other episodes of repair in the one-way information gap tasks investigated in this thesis, the keeper of less information is not in a position to complete a repair sequence until more information is available (see Extract 30).

Although S2 repairs herself twice in line 3, she does not deviate from her previous referential description ('duck...duck'). As the keeper of more information, S2 does not know what is missing in S1's map. This puts the responsibility of initiating repairs on the keeper of less information. Again, the participatory structure of tasks influences who initiates and completes repairs. This is apparent in line 4, where S1 again initiates a repair sequence. Not knowing what is on S1's map, S2 repeats the referential landmark without an upgraded description.

Extracts 32 and 33 have illustrated how one-way information gap tasks provide more opportunities for task-takers to repair RI trouble sources. Because much of the communicative focus is on discussing referential information (e.g., landmarks and objects), TI trouble sources receive little interactional attention.

In regard to the main research question set forth in the beginning of Section 5.2, do one-way information gap tasks encourage task-takers to repair? From a strictly referential (task-as-workplan) point of view, yes, but one-way information gap tasks do not provide an equal opportunity for both task-takers to initiate and complete repairs. The keeper of more information is in a superior position to repair, while the keeper of less information is in a superior position to initiate repair. As information is evenly distributed (e.g., through previously established interactional agendas), so too is the opportunity to repair.

More importantly, though one-way information gap tasks provide more opportunities for referential repairs than two-way opinion gap tasks, it is almost impossible to predict what task-takers will repair (see Extracts 3 and 4). As with two-way opinion gap tasks, knowing *a priori* (i.e., from a task-as-workplan perspective) that one-way information gap tasks will provide an abundance of repair episodes is a tenuous endeavor. What is known, more often than not, is that the repair episodes occurring in tasks of this type will be used to overcome RI trouble sources.

In regard to the construct validity of tasks, the assumption that certain tasks encourage task-takers to repair (or NfM) is largely contingent on what particular assumptions are being made. For instance, as was shown in previous sections, one-way information gap tasks appear to be conducive to RI trouble sources, whilst two-way opinion gap tasks seem to promote, though quantitatively less, TI trouble sources. Therefore, in order to maintain the construct validity of tasks with their assumed role in repair episodes, one must distinguish between the different trouble sources that a task is assumed to promote (e.g., RI trouble source versus TI trouble source). The next section will analyze the last participatory structure used in this thesis.

5.2.4 Opportunities for repair: two-way information gap tasks

This section will examine the trouble sources that occur in two-way information gap tasks. The purpose of this section is to determine whether the two-way information gap tasks used in this thesis encourages task-takers to repair. These task types are particularly interesting because they contain the same participatory structure of opinion gap tasks (i.e., two-way flow of information), yet the focus of discussion is identical to the one-way information gap task (i.e., exchange of referential information).

From a strictly RI trouble source point of view, the two-way information gap tasks used in this thesis do not provide many referential opportunities for repair. Because both task-takers in Tasks 1 and 5 share (or are missing) the same amount of information (cf. one-way gap), their talk resembles more of an open style of discourse (see Section 5.2.2 and Long 1981). What is particularly interesting in this case is that although Tasks 1 and 5 resemble an open style of discourse, the referential objectives in both tasks are significantly different. Whereas Task 1 simply asks task-takers to discuss similar and dissimilar characteristics, Task 5 provides a set of specific questions that are to be answered in regard to one referential statement. Therefore, it can be said that while Task 1 allows for 'free communication', Task 5 requires syntactical analyses. Yet, both nevertheless share the same type of task-in-process (Mondada and Pekarek Doehler 2004 also use a grammatical task that results in a more open style of discourse).

Because much of the communicative focus is diverted away from overcoming referential problems, all of the repair episodes occurring in the two-way information gap tasks used in this thesis are a result of TI trouble sources. As with most talk occurring in a more communicative setting, there is a strong preference for self-repair (Schegloff *et al.* 1977). This is evident in the following two extracts.

Extract 34: Dyad 6 – Task 1

1 S1: =yea[h]
2 S2: [and] the first one is (0.4) I am pationent you are, (0.4) not (0.3) I mean (0.3)
3 ·hh I am impationent you are pation

4 S1: yeah (0.6)

In Extract 34, both task-takers are completing Task 1. This extract begins with S2 summarizing the first established characteristic ('the first…I am pationent…you are not'). Before this point, both task-takers have identified who is and who is not patient. S1 therefore knows that the summarization in line 2 is not accurate. However, S1 neither initiates nor repairs this statement. Almost half of a second passes when S2 self-initiates self-repairs her previous summarization ('I mean…I am impatient and you are patient'). This momentary pause gives both task-takers the opportunity to initiate and complete a repair (cf. one-way information gap). Furthermore, this repair episode is used to overcome a TI trouble source. Further down the same extract, both task-takers in Extract 35 are in the process of identifying a second characteristic.

Extract 35: Dyad 6 – Task 1
1 S1: mm (0.8) th.hhh (0.3) how bout I think Im very:: (4.9) consilatory (1.1)
2 S2: what is (0.7)
3 S1: uhm (0.6) when uh (.) °w- w-° (0.4) when theres fights between the family or
4 something Im the one who tries to get everybody to get together and b[e] friends
5 again a[nd n]ot fight

In line 1, S1 establishes the second characteristic. The momentary pause that follows does not provide S1 with any indication that there is a problem in communication. In other words, the absence of any communication by S2 during this pause is not enough information for S1 to self-repair. The fact that there is a problem in communication is evident in line 2, where S2 other-initiates a repair sequence ('what is'). In lines 3-5, S1 goes on to self-repair her previous statement with an upgraded account of the characteristic. Therefore, even when 'other' task-takers initiate a repair sequence, there is generally an opportunity for the speaker of the trouble source to complete the repair.

However, as with the two-way opinion gap task used in this thesis, it is difficult to know from a task-as-workplan perspective whether task-takers will even attempt to repair any TI trouble source (e.g., Extract 3 versus Extract 4). Furthermore, even with the fairly

systematic ways in which task-takers in two-way information gap tasks self-repair, other-initiated other-repairs can occur. Extract 36 below provides an example of such a case. It is important to note that even in this other-initiated other-repair example, the repair episode is still used to overcome a TI trouble source.

Extract 36: Dyad 4 – Task 5
1 S2: the mouse (2.7) the dog barked at the mouse (1.7)
2 S1: the dog the borked (1.3) <cases< (0.5) cased (0.3) or, di[e]
3 S2: [chased] (0.3) die[d]

In this extract, both task-takers are completing the sentence meaning task. The extract begins with S2 attempting to decipher what animal was being barked at by the dog ('the dog barked at the mouse'). In line 2, S1 begins to summarize the convoluted sentence, but after a momentary pause, has a difficult time pronouncing the word chased ('cases…cased'). As S1 nears the completion of her turn ('or die'), S2 quickly interjects with an emphatic correction of the previous mispronunciation. This other-initiated other-repair can also be seen as maintaining the previously set forth interactional agenda ('…chased…died').

More importantly, the participatory structure of this task appears to put much of the communicative onus for repair on TI trouble sources. The two-way flow of information, which is evenly distributed between both task-takers, does not restrict turn-taking and repair opportunities. This even distribution of interactional rights results in a more open style of discourse. Consequently, any repairs that occur in the two-way information gap tasks used in this thesis will more often than not be a result of TI trouble sources.

This finding is reconfirmed by the fact that most repair episodes occurring in the two-way opinion gap task used in this thesis are not a result of RI trouble sources (i.e., two-way information gaps and two-way opinion gaps share the same participatory structure). While it is fairly certain that most of the repair episodes occurring in two-way participatory structures stem from TI trouble sources, task-based interaction is a reflexive

manifestation of task-takers' understanding and interpretation of task-as-workplan (see Chapter 3). Because of this, it is difficult to say if an abundance of repair episodes will occur as a result of implementing two-way information or opinion gap tasks. For instance, whereas one dyad may employ an extended series of repairs to overcome one trouble source (e.g., Extract 3), other dyads may establish a more efficient and effective way to overcome the problem (e.g., Extract 4).

As with two-way opinion gap tasks, two-way information gap tasks may not be suitable for researchers concerned with predictable occurrences of repair. It is difficult to say from a task-as-workplan perspective that tasks with two-way participatory structures will induce an abundance of repair episodes. The fact that most of the repair episodes are from TI trouble sources makes this endeavor even more tenuous. This unquestionably has an impact on the issue of construct validity. If tasks with two-way participatory structures more often than not promote repairs of TI trouble sources (a dynamic and unpredictable phenomenon), then it can be assumed that its referential information does not provide any static and overarching influence on repair episodes. Accordingly, from a referential perspective, two-way information gap tasks do not encourage task-takers to repair (see Research Question 2). As mentioned before, TI trouble sources occur as a result of task-takers' communication trouble, and not referentially induced by task-as-workplan. The section below will summarize these, and the previously mentioned findings.

5.2.5 Summary

Do tasks encourage task-takers to repair? Section 5.2 has shown that, as with turn-taking procedures (see Section 5.1), the participatory structure of tasks has a significant role in repair episodes. This was shown by first differentiating between two trouble sources (RI and TI). The former trouble source was said to be referentially induced

(though any decision to repair is ultimately a task-taker choice), whereas the latter was said to be a result of task-taker communication trouble. It was also shown that although RI trouble sources are more frequent than TI trouble sources in one-way information gap tasks, repairs for RI trouble sources seldom occur in tasks with two-way participatory structures. This is largely attributed to the more open style of discourse in the latter task type, and the referential focus in the former. As a result, the participatory structure of tasks gives some indication as to what type of communicative trouble will be repaired. However, it is difficult to say from a task-as-workplan perspective that a task will provide an abundance of repair episodes. More importantly, any prediction must first differentiate between trouble sources, since repairing each of them serves different communicative purposes (Seedhouse 1999b).

The construct validity of a task is contingent on this delineation. For example, Section 5.2.2 gave two examples of how the open style of discourse in two-way opinion gap tasks allowed both task-takers to focus on more free language production. This focus shifted much of the communicative onus away from discussing referential information. Most of the repair episodes in this type of task, consequently, are a result of TI trouble sources. With this in mind, two-way opinion gap tasks, though less conducive for referential repairs, appear to be more beneficial for language production (Nakahama *et al.* 2001).

Section 5.2.3 then discussed how opportunities for repair in one-way information gap tasks are restricted by the asymmetrical distribution of referential information. Thus, tasks with one-way participatory structures significantly limit who initiates and completes repairs. For instance, keepers of more information are obligated to repair their own referentially provided information, whereas keepers of less information are limited to initiating repair sequences. Specifically, the latter task-taker cannot repair information that he or she does not have; this limitation is lifted once the former task-taker provides

more referential information, and therefore momentarily evenly distributes the referential information (see Extract 22).

Because the one-way information gap tasks used in this thesis establish an interactional framework that focuses on the exchange of referential information (e.g., drawing objects or navigating through landmarks), most of the repair episodes are referentially induced. Therefore, the participatory structure of tasks not only influences who can initiate and complete repairs, but also what type of communicative trouble will be repaired.

Lastly, Section 5.2.4 demonstrated that the two-way information gap tasks used in this thesis give both task-takers an equal stake at taking turns, and initiating and completing repairs. There appears to be less referentially focused talk because of this structural flexibility. As with two-way opinion gap tasks, much of the interactional vitality is focused on freely producing and exchanging ideas. As a result, the majority of the repair episodes in this type of task are a result of TI trouble sources. It can then be said with a great deal of confidence that tasks with a two-way participatory structure will provide an interactional framework that is favorable for free communication, and repairs for TI trouble sources.

It has also been established that while participatory structures do not necessarily encourage task-takers to repair, they do influence what trouble source will be repaired, and who is initiating and completing those repairs. This investigation was completed in relation to the analysis set forth for Research Question 1. Specifically, it was found in Section 5.1 that the turn-taking mechanics of task-based interaction (a task-in-process variable) is reflexively tied to the participatory structure of tasks (a task-as-workplan dimension). Section 5.2 then adopted this approach to the investigation of repair. This approach is parallel with Seedhouse's (1999b; 2004) call for the analysis of repair to be

context sensitive. The analyses from Sections 5.1 and 5.2 can then be seen as forwarding the notion that both task perspectives should be considered. The next section will provide further support, by examining the intricacies of repair episodes.

5.3 What Repair Resources Do Task-Takers Use in Task-Based Interaction?

The previous section discussed whether tasks could encourage task-takers to repair. It was shown that the participatory structure of a task does have some influence on who is the repairer, and what communicative trouble is being repaired. These finding are crucial to the construct validity of a task because if a specific task-as-workplan variable can alter task-in-process, then analysis of the NfM or repair in task-based interaction must differentiated and identify such corollary variables (see Fortune and Thorp 2001, where both researchers attempt to go beyond frequency counts, and account for the complexity of NfMs).

With this in mind, this section will conclude the data analysis chapter by identifying the repair resources (i.e., types of repair) task-takers use in task-based interaction. The data and subsequent analysis will show that a conversation analytic interpretation of repair is more interactionally encompassing than the NfM. Again, such detail is directly applicable to the construct validity of tasks. Specifically, current understandings of the NfM are impoverished because of the limited role interaction plays in its perspective. As previous sections have demonstrated, repairs and its ensuing interaction are multifaceted. What the NfM offers, on the other hand, is an interactionally static interpretation of repair (see Section 2.5). As Fortune and Thorpe (2001, p. 152) have stated in regard to classification and quantification of interactional episodes, "The employment of such a framework implies that all episodes carry equal weight, and ignores some distinctive features of the interactions – a richness in the data which is important to capture."

Therefore, this concluding section should be seen as providing more detail to the otherwise general and somewhat ambiguous NfM concept.

Section 3.2.3 introduced nine ways in which task-takers can initiate, maintain, and complete repairs (i.e., interactants, repair position, directed and undirected repair initiators, exposed and embedded repairs, referential, task-taker, and activity repairs). These dependently related repair types will be analyzed in four categories (i.e., repair architecture, explicitness, and communicative flow; trouble sources were discussed in the previous section).

The repair architecture section will discuss the interactants and repair position. That is, this analysis will focus on who is initiating and completing repairs, and in what interactional sequence. Because Section 5.2 has partly investigated this issue in regard to the participatory structure of tasks, this section will be brief. Analysis will nonetheless demonstrate the task-based interaction importance of interactants and repair position.

The explicitness section will investigate how task-takers initiate repairs. The two concepts covered in this area of analysis are directed and undirected repair initiators. This section will identify the different levels of explicitness in signaling a trouble source, and the interactional consequence of such moves. In a similar vein, the communicative flow section will illustrate how exposed and embedded repairs influence the ensuing communicative flow. The findings in these latter two sections are significant because the data clearly demonstrate the dynamic nature of repair strategies.

The remaining category introduced in Chapter 3, trouble sources, was discussed in Section 5.2. Specifically, referential and task-taker trouble sources occur as a result of different participatory structures. This section also demonstrated the variable ways in which task-takers repair in task-based interaction.

5.3.1 Repair architecture: Interactants and repair position

Chapter 3 introduced two variables central to a conversation analytic understanding of repair. The first variable concerns interactants (e.g., self-initiated self-repair or other-initiated other-repair), while the second is repair position (e.g., repair in trouble source or next turn). Each variable provides four repair alternatives. The repair architecture category accordingly consists of eight structures. Although it is the not the purpose of this section to discuss each structure (see Section 3.2.3), analysis will demonstrate the significance of including such structures to an investigation of repair. In regard to the third research question, this section will show how the interactants and repair position variables are repair resources available to task-takers.

In dyadic task-based interaction, task-takers have two general resources for repair. These repair resources are the interlocutors participating in task-based interaction. For example, from the standpoint of the speaker of the communicative trouble, a task-taker has the 'self' (themselves) and 'other' to help initiate and complete repairs. In the following extract, a communicative trouble is self-initiated and self-repaired. This can be seen as a self-reliance strategy of repair (N.B. this type of repair strategy can also occur as an other-initiated self-repair; in the interest of space, only self-initiated self-repairs will be analyzed). That is, the speaker of the communicative trouble knows where the trouble is and is obliged to repair it.

Extract 37: Dyad 2 – Task 2
1 S1: whaju think (0.5) about it (0.9)
2 S2: uh- eh- I totally agree with you English the- is the worlds official language (0.3)
3 ((task continues))

In Extract 37, both task-takers are completing the controversial statements task. After S1 completes her viewpoint in line 1, she opens the floor by asking S2 to provide an opinion. In line 2, S2 accepts the previous viewpoint ('I totally agree with you), and then begins to provide her opinion by reestablishing the controversial statement ('English is the world's official language). However, as S2 begins to establish her opinion ('English

the…'), she stops mid-utterance to self-initiate self-repair the missing auxiliary verb ('…is the worlds official language'). It is important to note that the missing auxiliary verb is not crucial to the comprehensibility of the statement. Nevertheless, S2 realizes her syntactic mistake and decides to self-correct it. Again, this type of repair can be seen as a reliance on the self as a repair resource. Repairs of this type generally occur during the trouble source turn (Schegloff *et al.* 1977). Extract 38 provides an additional example.

Extract 38: Dyad 6 – Task 3b

1 S2: no not the rice cooker the: (0.6) mm:: (0.2) the oven (0.3)
2 S1: the stove. (0.3)
3 S2: yeah (0.5) and then on, top of it i:s (0.4) mm: like (1.3) e:mm:: (3.0) like a:: (1.3)
4 mm (1.6) I- Im not sure if (.) there is ov- an oven underneath and on the: (0.6)
5 ((task continues))

In this extract, both task-takers are completing the picture-drawing task. S2 begins this extract by describing an oven. In line 2, S1 acknowledges the description by proving an alternative description ('the stove'). This alternative is accepted by S2 in line 3 ('yeah'), yet an upgraded description of the picture follows. In line 4, S2 continues with her picture description ('there is ov-…'), but stops mid-utterance to self-initiate self-repair a missing indefinite article ('…an oven underneath…'). As in Extract 37, this morphosyntactic mistake does not dramatically alter the meaning of this statement. The speaker of the trouble source, nevertheless, feels obliged to self-correct her grammatical mistake. Again, this type of repair by and large occurs in the trouble source turn.

This reliance on the self as a repair resource brings up an important interactional trend. In regard to the task-based interaction corpus used in this thesis, repairs for morphological and syntactic errors, if any, occur as a result of self-repairs. The preference to self-repair for morphological and syntactic errors demonstrates a strong institutional influence (Seedhouse 2004). What this trend demonstrates specifically is that the task-takers in this thesis are largely focused on fluent communication.

This phenomenon has significant implications for researchers and teachers alike. That is, the task dimensions identified in this thesis do not appear to encourage, nor do task-takers feel compelled to acknowledge, the negotiation of grammatical content. This finding is unmistakably restricted to the tasks used in this thesis. Nevertheless, these tasks help demonstrate the problem in assuming a one-to-one relationship between the manipulation of task dimensions and the negotiation of linguistic form (see Section 2.2). Specifically, it is ultimately a task-taker decision to focus primarily on linguistic form or meaning.

The following extracts will show how task-takers rely on their fellow interlocutor as a repair resource. This can be seen as an other-reliance repair strategy. Repairs of this type are generally concerned with overcoming some referential trouble (cf. grammatical trouble). This type of repair strategy can occur as a self-initiated other-repair or other-initiated other-repair. As with the self-reliance repair strategy, the speaker of the communicative trouble using an other-reliance repair strategy knows where the trouble is, but in this case cannot or is not compelled to repair it (N.B. extensive data have proven that task-takers are reluctant to correct each other's linguistic errors; see Seedhouse 2004). In the following extract, both task-takers are completing the picture-drawing task. S2 is the picture describer and S1 is the picture drawer.

Extract 39: Dyad 2 – Task 3b

1 S2: [y]eah (0.8) and then (1.1) the other one is um: (2.9)
2 grill? I dont know (0.6) its um (1.8) if you fry- (.) fry eggs (0.6)
3 S1: eggs (0.7)
4 S2: you use pot and another [[pan]]
5 S1: [[pan]] (0.5)
6 S2: yea- yeah yeah (0.6)
7 S1: on the roof? (0.4)
8 S2: uh:: not pan just e[:]
9 S1: [pan] (0.4) [[pan]]
10 S2: [[pan]] (0.5)
11 S1: pan P-A-N pan=
12 S2: =yeah pan and another things is (0.8) you should u[h]
13 S1: [·hh.hh]·hh.hh (0.5) w- (0.8)

14 hhh (0.4) spatula
15 S2: yeah (0.4) I think that y- you are r.h.i.h.ght (0.3)

In line 1, S2 is describing an object for S1 to draw. As S2 proceeds to describe a grilling utensil, she demonstrates a non-understanding by self-initiating a repair sequence ('grill…I don't know…if you fry eggs'). The utterance by S1 in line 3 does not appear to facilitate any comprehension, so S2 provides an alternative description ('you use pot and pan'). This description is immediately acknowledged by S1 in line 5 ('pot). The topic of discussion then focuses on a descriptive negotiation of a pan (lines 7-11). In line 12, S2 upgrades her description by suggesting that the trouble source (line 2) is an object that accompanies a pan ('…pan and another things is…'). As S2 completes her upgraded description, S1 concomitantly repairs the trouble source in line 14 ('spatula'). The speaker of the trouble source finally accepts the self-initiated other-repair in line 15.

The position of this repair is peculiar in that it takes a series of negotiations to overcome the trouble source. It can be recalled in Section 3.2.3 that repair positions are generally located in four positions (e.g., next turn or third turn). In Extract 39, the repair occurs thirteen turns later from the original trouble source. The interaction leading up to this repair, therefore, focuses on overcoming one referential problem. Accordingly, the position of the repair represents the type of interactive repair work being done (see Section 5.3.3). That is, the speaker of the trouble source, who happens to be the keeper of more information, is relying heavily on the other to repair the trouble source. Because the keeper of less information does not have the same repair opportunities and is missing referential information (see Section 5.2), she or he can only guess as to what the keeper of more information is trying to describe. This is perhaps why the trouble source in the extract above takes several turns to overcome. As mentioned above, an other-reliance repair strategy is employed because the speaker of the trouble source is unable to repair.

As a result, other-repairs in this thesis occur largely after the next turn. This is demonstrated in Extract 40.

This last extract will also illustrate the second available other-reliance repair strategy. That is, Extract 40 provides an example of an other-initiated other-repair (cf. self-initiated other-repair). As with the repair episode in Extract 39, the speaker of the trouble source cannot, or is not compelled to, repair the communicative problem. Therefore, the speaker of the trouble source must use his or her fellow interlocutor as a repair resource. In the following extract (condensed version of Extract 22), both task-takers are completing the picture-drawing task. S2 is the picture describer and S1 is the picture drawer.

Extract 40: Dyad 3 – Task 3a

1 S2: °yeah° (1.1) and uh: inside of square there is u- an oracle (0.8)
2 S1: oracle?
3 S2: °oracle?° (.) °is that oracle° that Im not sure but uh (0.3) the picture uhm (0.3) a
4 circle? (1.0) a circle but not so round (0.9)
5 S1: oval shape (0.6) li[ke e]gg (0.3)
6 S2: [yeah]
7 S2: yeah↑ yeah yeah (0.4)

In line 1, S2 is attempting the describe an oval. At the end of this description S2 uses the word 'oracle' to convey the shape. This inappropriate lexical selection represents the trouble source. This is evident in line 2 when S1 other-initiates a repair episode ('oracle?'). Subsequently, S2 realizes that the word oracle may not have been an appropriate choice ('...is that oracle...I'm not sure'); as a result, she upgrades her description with a more specific shape ('a circle but not so round'). This utterance both demonstrates S2's non-understanding, and reliance of the other to overcome it. In line 5, S1 completes the repair sequence by other-repairing the trouble source ('oval shape...like egg'). The accuracy of this repair is shown in lines 6 and 7, when S2 interjects four acknowledgement tokens ('yeah yeah yeah yeah').

This extract re-highlights the role participatory structures have on who is initiating and completing repairs. In line 2, S1, the keeper of less information, other-initiates a repair

sequence because of the unusual description that preceded in line 1. As demonstrated in Extract 39, the keeper of less information does not have the same repair opportunities and referential information as the keeper of more information. However, when some referential information is shared ('a circle but not so round'), the keeper of less information is able to complete the repair. In effect, by displaying nonunderstanding or selecting an inappropriate word to describe some referential information, the keeper of more information in one-way information gap tasks restructures the participatory structure to something more similar to that found in two-way gaps. Thus, participatory structures, or referential information, plays a powerful task-based interaction role in turn-taking and repair.

It is also important to note that the repair episodes in Extracts 39 and 40 are concerned with overcoming a referential problem (cf. Extract 38). Again, the fact that other-repairs are not used in this thesis to overcome task-taker communicative problems (e.g., morphosyntactic errors) demonstrates the institutional order of these tasks. It appears that the task-takers in this thesis are centrally concerned with completing the tasks, with fluency-based interaction seen as crucial to attaining this objective. Put in another way, these task-takers have not interpreted the tasks used in this thesis as an opportunity to practice linguistic form. This is evident by the virtual absence (one identified case) of any other-repairs for grammar.

This section has examined the architecture of repair episodes. Within this architecture, two repair resources were identified. These two dependently related resources are the interactants and repair position. For the former, it was shown in the previous extracts that task-takers have themselves and their fellow interlocutor as repair resources. For the latter, relying on the self or other was shown to have an effect on where the repair occurs.

The type of communicative trouble that occurred also appeared to have an effect on the who and where of repair episodes (e.g., self-initiated self-repairs occurring in the trouble turn to overcome a syntactic error). These findings demonstrate a strong institutional order. Specifically, the task-takers in this thesis are primarily concerned with fluency-based communication, and do not feel obliged to employ much interactional work to overcome form related trouble. These two repair resource examples only provide a partial picture of the rich, variable, and dynamic ways in which task-takers repair. The next section will therefore discuss two additional repair resources that are available to task-takers. Like the previous examples, these resources affect the dynamics of repair episodes.

5.3.2 Explicitness: Directed and undirected repair initiators

The explicitness of a repair encompasses two available repair resources. These repair resources are directed and undirected repair initiators. As introduced in Section 3.2.3, a directed repair initiator identifies specifically where the trouble source is, whereas an undirected repair initiator does not. These repair resources are important interactive features because they help achieve intersubjectivity (see Schegloff 1992a for a discussion on how repairs help achieve intersubjectivity). Because the institutional trend in this thesis is for fluency-based communication, most of the repair work done to achieve intersubjectivity concerns referential issues (cf. Extracts 37 and 38). It can also be recalled that the participatory structure of a task influences who can initiate and complete repairs (see Sections 5.1 and 5.2). With these two issues in mind, it is the 'other' who determines the level of explicit repair initiators. These repair initiators are also largely employed to overcome some type of referential problem. However, as the extracts below will illustrate, repair sequences are a co-constructed endeavor.

In Extract 41 for example, both task-takers are completing the picture-drawing task (N.B. the participatory structure of this task is a one-way information gap). Therefore, the keeper of less information is responsible for initiating any incomprehensibility she may have. In other words, keepers of more information cannot predict what the other task-taker may or may not know. Both task-takers are nonetheless responsible for the success of this repair episode. In this extract, S1 is the picture describer and S2 is the picture drawer.

Extract 41: Dyad 1 – Task 3b

1 S1: uh:: (0.4) there is a squae (1.5) rectangular actually act- actually that is a
2 rectangular (1.4) um:[:] inside the rectangular (0.8) uh[::] (0.9)
3 S2: [°re°] [°rectan-°]
4 S1: o:val (1.3)
5 S2: °o-° (.)
6 S1: big oval (2.6) you dont know what I mean (0.4)
7 S2: no hh.haha
8 S1: you dont- (0.4) do- do you do you know wha:t scwae:: means (0.6) scware
9 S2: scwa
10 S1: scware (3.0)
11 S2: square ((distinct sounds of S2 drawing))
12 S1: uh huh
13 S2: °mm [[hm°]]
14 S1: [[uh]] huh that is a scware
15 S2: °mm°

In line 1, S1 is describing a shape for S2 to draw. As S1's description changes from a square to a rectangle, S2 can be heard silently repeating the trouble source ('re...retan'). Although these initiations for repair simultaneously occur as S1 is describing her picture, each initiation for repair occurs immediately after noticeably long pauses. These pauses provide opportunities for S2 to express her non-understanding, though both initiations to repair the rectangle trouble are not acknowledged by S1. This is evident in line 4, when S1 moves from describing a rectangle to an oval. S2 once again expresses her non-understanding by repeating the trouble shape.

It should be said at this point that all three repair initiators are directed, in that they all specifically identify the trouble source. However, it is only until line 6 when S1

acknowledges the repair initiator ('big oval…you don't know what I mean'). After S2 declares her non-understanding in line 7 ('no…'), S1 provides a downgraded description of the original trouble source (i.e., rectangle to a square). This utterance is a self-repair of the other-initiated repairs occurring in line 3. The repair episode is completed after S2 demonstrates understanding by drawing the object.

It is important to note that almost all directed repair initiators in this thesis occurred as a result of some type of referential problem in one-way information gap tasks. It appears that the asymmetrical distribution of information in these types of tasks makes the negotiation of referential information a paramount endeavor. This should come as no surprise since it is the responsibility of the keeper of more information to furnish the keeper of less information with the missing referential information.

This extract demonstrates how explicit repair initiators are used as a resource by the 'other'. In this particular extract, each explicit repair initiator that is employed by the other acts as an effective means in which both task-takers are able to achieve intersubjectivity, and inevitably complete the task. Though much of the communicative onus of expressing non-understanding is initiated by the other (in this case, the keeper of less information), Extract 41 demonstrates how the speaker of the trouble source is also a crucial resource for achieving intersubjectivity.

The first trouble source in the previous example provides an excellent example. It can be recalled that the first explicit repair initiator concerned the rectangle (lines 1-3). Instead of providing additional rectangle descriptions, the speaker of the trouble source downgrades her description to a shape that is easily identifiable. Although it is impossible to predict the effectiveness of any alternative descriptions, this downgraded version of the trouble source quickly fixes the problem. More importantly, Extract 41 highlights the cooperative nature of repair episodes. That is to say, isolating specific

utterances within a repair sequence, without examining the sequential nature of the interaction, undermines the variable and dynamic ways in which interlocutors repair (Seedhouse 2004; Kasper 1985).

In Extract 42 for instance, an undirected repair initiator is used to overcome a communicative problem. Though the speaker of this type of repair initiator does not explicitly identify the trouble source, the joint participation of both task-takers helps attain understanding. Before introducing the extract, it is important to note that undirected repair initiators in this thesis are variable and infrequent (cf. directed repair initiators occurring primarily in one-way information gap tasks). Specifically, when undirected repair initiators do occur, they are used to overcome referential and communicative trouble in any type of participatory structure. In the following extract, both task-takers are completing the controversial statements task (two-way opinion gap).

Extract 42: Dyad 1 – Task 2
1 S1: ehm: (9.9) how bout second one (1.8)
2 S2: hm?
3 S1: how bout second one (.) sick pick people should be able to e::nd (0.9) their life
4 S2: hm:: no I dont (.) I dont agree it (0.3)

This extract begins with S1 introducing a new interactional agenda. After a noticeably long pause, S2's backchannel with rising intonation in line 2 displays non-understanding. Whereas the directed repair initiator in Extract 41 specifically identified the trouble source, this repair initiator simply demonstrates non-understanding (i.e., the repair initiator does not specifically point to the trouble source). Like many other repair episodes in this thesis, the speaker of the trouble source upgrades her previous utterance with specific information. (N.B. both the trouble source and repair in lines 1 and 3, respectively, seek S2's opinion on the controversial statement). This repair episode is an other-initiated self-repair in that S2 initiates (or displays) non-understanding, and the speaker of the trouble source completes the repair sequence.

This repair episode is also an attempt to fix a communicative problem (cf. referential problem). It can be recalled that the participatory structure of two-way tasks appear to encourage task-takers to communicate with less referential negotiation (c.f. the asymmetrical distribution of information in Extract 41). Although the two-way flow of opinions in Extract 42 does not restrict who can initiate and complete repairs (cf. one way information gap), the joint responsibility to successfully complete repairs transcends the participatory structure of tasks. Put in another way, while the distribution of referential information in tasks influences the responsibility to initiate and complete repairs, the impending success of repair episodes will always be a joint endeavor.

This section has introduced two repair resources available to the initiator of repair episodes. As Extracts 41 and 42 have shown, these resources only displays non-understanding. Specifically, both directed and undirected repair initiators activate, with varying degrees of explicitness, repair episodes. However, it is the participation between both task-takers that is required for the successful completion of a repair episode. In this thesis, there does not appear to be any significant difference in the success of repair episodes that are activated by directed or undirected repairs initiators (though it is difficult to create a criteria for assessing successful repair episodes; e.g., quantifying the number of turns versus measuring achieved understanding).

The underlying objective of introducing these repair initiators is two fold. First, directed and undirected repair initiators are two of the many repair resources available to task-takers (see Section 5.3). Any comprehensive account of repair (or NfM) must account for the intricate and sequential ways in which task-takers repair for communicative or referential problems (van Lier 1988; Seedhouse 2004). In addition, repair initiators have one primary role in repair episodes. That is, they make available to the speaker of the trouble source that there is some type of trouble. More importantly,

repair initiators only represent one sequential stage of a larger sequence of repair episodes.

This leads to the second objective of this section. That is, the successfulness of repair episodes is not only a matter of the explicitness of repair initiators, but also on the ability of both task-takers to co-construct a mutual understanding. Undirected and directed repair initiators are terms simply used to identify a specific speaker within a repair episode; consequently, such terms only account for a partial picture of the rich and dynamic ways intersubjectivity is achieved. In order to provide a more comprehensive picture of repair in task-based interaction, the subsequent section will introduce two additional repair resources available to task-takers.

5.3.3 Communicative flow: Exposed and embedded repairs

Task-takers have two additional forms of repair resources. These are exposed and embedded repairs. The former repair resource is said to stop the flow of communication, whereas the latter is said to occur within the flow of communication (Jefferson 1987). While directed and undirected repair initiators were said to be resources initiated by the other task-taker, exposed and embedded repairs are the joint responsibility of both task-takers. In other words, the decision to stop the flow of communication in order to fix an interactional problem is a resource that is initiated and carried out by both task-takers (though it should be highlighted that in this thesis nearly all self-initiated self-repairs are embedded, while exposed repairs almost always occur as other-initiated repairs). This should come as no surprise since it has already been established that most other-initiated repairs are used to fix referential problems (see Section 5.3.1), whereas self-initiated self-repairs generally occur as a result of communicative breakdowns (Extract 38 is the only example of an other-initiated other repair of communication). Again, these interactional trends highlight the relationship between the institutional order of task-based interaction

(i.e., task-takers' orientation to these tasks as a fluency-based medium), and the participatory structure of tasks (i.e., the distribution of referential information and its influence on task-based interaction).

Take the following extract for example. In this episode, the repairs are exposed in that the flow of communication is momentarily stopped to overcome a referential problem. In Extract 43, both task-takers are completing the picture-drawing task (N.B. this extract is an extension of Extract 7; see Section 3.2.3). The picture describer is S1 and the picture drawer is S2. Consequently, there is an uneven distribution of information (i.e., one-way information gap).

Extract 43: Dyad 1 – Task 3a

1 S1: =inside the square there is oval (1.1)
2 S2: °h[m°]
3 S1: [you] know what. e- (0.3) what oval is (1.1)
4 S2: O,
5 S1: o:::val
6 S2: ova (0.5) o[va]
7 S1: [o::]:val (0.4)
8 S2: whats ova (0.9)
9 S1: uh::: d-you uh:: do you know the shape of <u>eggs</u>, (1.1) eggs: (3.2)
10 S2: o[va]
11 S1: [eg]gs (0.7) E, G, G, (1.0)
12 S2: egg (0.6)
13 S1: eh [[huh]]
14 S2: [[oh-ok]]
15 S1: eg[g]
16 S2: [eh]
17 S1: eh huh
18 S2: eh huh (0.6)
19 S1: do you know shape of eggs (1.0) that is (.) <u>oval</u> (1.2)
20 S2: hhh (2.4) °a:e::° O (0.8)
21 S1: O, vwee A, L, (2.2)

In line 1, S1 is attempting the describe two shapes. Though S2's low-pitched backchannel that follows may be construed as an acknowledgement token, the utterance (and preceding pause) acts as a repair initiator. This is evident in line 3, where S1 simultaneously redirects the interactional focus on the negotiation of the oval. Whereas the referential negotiation of the square took a relatively short amount of time to

overcome, lines 4-21 illustrate an extended sequence of repair moves. This occurs partly because the keeper of less information (S2) has not made it clear whether she completely understands the object (though both task-takers do have the ability to abandon the referential issue). While space restrictions do not permit a line-by-line analysis, some salient points will be highlighted.

Firstly, the extended sequence of repair moves begins in lines 4-7, when S2 makes several attempts to re-utter the trouble source. S1 follows these attempts (other-initiated) by repeating (self-repairing) the trouble source. It becomes apparent in line 8 that these repetitions are not successful when S2 finally asks what an oval is. The analogy that follows can be seen as an upgraded repair of the original trouble source (i.e., oval to egg shape). After several exchanges and acknowledgement tokens (lines 10-18), S1 makes an explicit connection between an egg and oval ('do you know shape of egg…that is oval'). This utterance is followed by both task-takers spelling the trouble source.

It should be clear from this extract that both task-takers have decided to focus all of the communicative attention on overcoming the referential problem. That is to say, the series of repairs occurring in Extract 43 are exposed in that the flow of communication is put on hold to negotiate the oval. Although this particular shape is not crucial to the overall success of the task, both task-takers spend a great deal of time achieving intersubjectivity.

The next extract provides an example of an embedded repair (also see Extract 8). In this extract both task-takers continue with the flow of communication, despite experiencing a breakdown in communication. The task-takers in Extract 44 are completing the map task. The route holder in this extract is S1.

Extract 44: Dyad 1 – Task 4

1 S1: =you can go up to::: (4.2) ·hh you can go up <u>big</u> right hand side (1.7)
2 S2: °big (0.8) right (0.5) hand°
3 S1: right hand side (3.2)

This extract begins with S1 establishing a new set of directions (cf. landmark). In line 2, the route follower silently repeats the directions, but omits the 'side' ending ('big…right…hand'). This utterance, though inclusive of all key elements of the direction, is quickly repaired by S1 in line 3. That is to say, S1 takes the omission of the 'side' ending as a potential misrepresentation of directions (i.e., big right hand could be taken as a landmark). As a result, S1 repairs the previous utterance with the key 'side' ending. More importantly, the repair is embedded because the route provider performs the reformulation within the following utterance of the trouble source, and without any explicit juxtaposition between line 2 and line 3.

The flow of communication in this extract does not stop in the same way as it does in Extract 43. That is, the embedded repair in Extract 44 implicitly fixes the trouble source, whereas in the previous extract both task-takers spend much more time overcoming their referential problem. This implicitness is part and parcel of embedded repairs.

The significance in differentiating between embedded and exposed repairs is related to interactional organization. In the former resource, repairs are largely initiated and completed in one sequence (e.g., Extract 44). In the latter resource, the initiation and completion of repairs are generally recycled until the trouble source is resolved (e.g., Extract 43). Seedhouse (2004, p. 142) makes the claim in regard to L2 classrooms, "…that there is no single, monolithic organization of repair…" Although this statement is pedagogically motivated, the organization of repairs in this thesis is also variable and dynamic. That is to say, as Section 5.3 has shown, concepts such as repair (or the NfM) occur in many ways and forms. Consequently, it is difficult to make any claims in regard to repairs without accounting for its sequential environment (see Section 5.3.1) and interactional ramifications (see Sections 5.3.2 and 5.3.3).

This section has attempted to demonstrate the importance of sequence and interaction in the investigation of repairs. Static concepts, such as clarification requests, comprehension checks, and even other-initiated and self-initiated repairs, are deficient when taken out of their sequential and interactional context. It is for this reason why making *a priori* claims in regard to repairs is a difficult and tenuous endeavor. For instance, the explicitness of a repair initiator (directed and undirected; see Section 5.3.2) is thought to affect the successfulness of a repair episode (Drew 1997). However in this thesis, there appears to be no significant difference in the success of directed and undirected repair initiators. This was said to be partly due to the institutional nature of the tasks used in this thesis (i.e., the propensity to focus on fluent communication), and the participatory structure of the tasks (i.e., the distribution of information).

Accordingly, a comprehensive investigation into repairs must not only account for whether a task encourages task-takers to repair (see Section 5.2), but also account for its sequential and interactional context (Section 5.3).

5.3.5 Summary

What repair resources do task-takers use in task-based interaction? Section 5.3 has identified three broad categories that encompass six repair resources. The first category discussed how task-takers use themselves (self and other) as repair resources. Such resources, however, are restricted by the participatory structure of tasks. As highlighted throughout this chapter, the distribution of referential information influences the ability to initiate and complete repairs. Consequently, differentiating between the self and other in repair episodes is an important variable in task-based interaction.

In addition to showing how task-takers may have limited repair rights, Section 5.3.1 has shown that the initiation and completion of repairs possess important sequential properties. For instance, self-initiated self-repairs largely occur during the trouble source

turn. This finding provides additional support to the fact that preference for repair is given to the speaker of the trouble source. This phenomenon also illustrates the institutional order of the task-based interaction in this thesis. Unlike in many pedagogical, classroom settings where the speaker of the trouble source is traditionally repaired (and corrected) by the teacher (see Seedhouse 2004, for foreign language classrooms, and McHoul 1990, for an opposite interpretation in first language classrooms), the tasks completed in this thesis seem to be completed with the intention to effectively and efficiently exchange referential information. This is why there were very few repairs of TI trouble sources in this thesis. When they did occur, in all but one case (Extract 36), the speaker of the trouble source repaired the problem.

The next two sections (Sections 5.3.2 and 5.3.3) examined how the explicitness of repair initiators and the communicative flow of repairs were important repair resources available to task-takers. In the former category, task-takers can employ directed and undirected repair initiators. The difference between the two being directed repair initiators explicitly point to the trouble source, whereas undirected repair initiators do not. Though this difference can potentially affect the success of repair episodes, both repair initiators share an important interactional characteristic. That is, by displaying nonunderstanding of a trouble source, both repair initiators represent the beginning stage of a repair episode. As Extracts 41 and 42 have shown, it is the responsibility of both task-takers to complete the repair episode, and consequently achieve intersubjectivity.

In the latter category, task-takers also have the ability to establish how much interactional attention a trouble source gets. In exposed repairs, a trouble source is the interactional focus, whereas in embedded repairs, a trouble source is rectified during the flow of communication. It was later claimed that the interactional organization of exposed and embedded repairs, like all other repair resources identified in Section 5.3, is

variable and dynamic. That is to say, embedded repairs are sequentially different than exposed repairs because the former repair frequently occurs within one repair cycle (i.e., a trouble source is initiated and completed), while the latter repair is recycled until the trouble is fixed (i.e., multiple initiations for repair). Put in another way, the interactional context in which troubles occur helps create the means in which task-takers employ specific repair moves.

As highlighted throughout this thesis, the interactional context is manifested in the turn-by-turn moments of talk-in-interaction. This issue will be discussed in detail in Chapter 6. Before moving on to the next chapter, the following section will highlight the key findings introduced in this chapter.

5.4 Chapter Summary

Because Chapter 6 is dedicated to summarizing the findings discussed in this chapter and putting them into a larger context, this section will only highlight key findings. This final summary of data is divided into three areas, each representing previously established research questions.

First, Section 5.1 introduced the relationship between participatory structures and turn-taking rights. It was shown in this section that the degree to which referential information is distributed to task-takers will cause deviation in how turns are sequenced. For example, because one-way information gap tasks possess an uneven distribution of referential information, the task-taker who does not possess such information must align his or her turns to the interactional agenda set forth by the keeper of more information.

Although participatory structures were shown to influence turn-taking (i.e., task-as-workplan influence over task-in-process), the ways in which task-takers carry out tasks varied (i.e., task-in-process variation). This reflexive relationship between task perspectives leads to the next important factor discussed in this chapter.

Second, Section 5.2 demonstrated that in order to investigate whether tasks encourage task-takers to repair, researchers must differentiate between what type of trouble source is being repaired. Also essential to this understanding is the role participatory structures have on repair opportunities. For instance, while one-way information gap tasks appeared to provide more opportunities to repair referential information (RI trouble source), the keeper of less information has much of the communicative onus to initiate (make available) these trouble sources. Conversely, the keeper of more information in these types of tasks has much of the communicative onus to complete the repair episode. What is left, in much of the same way as turn-taking, is an uneven distribution of repair opportunities in one-way information gap tasks.

Differentiating between referential and communication trouble sources also establishes a better understanding of how tasks influence opportunities to repair. For example, though two-way participatory structures (information and opinion gaps) resulted in little referential repairs, the long stretches of talk that did occur allowed task-takers to communicate more freely. This in turn resulted in more opportunities to repair for form related trouble, though these instances were somewhat rare (see Gass *et al.* 2005).

Referential repairs, though quantitatively higher in one-way information gap tasks, mostly occurred as a result of some lexical or task problem. It is therefore difficult to say what linguistic benefit can be gleaned from quantifying or isolating these types of trouble sources (see Slimani-Rolls 2005). It is for these reasons that a more contextual, comprehensive account of repair is necessary to ensuring the construct validity of task-as-repair-elicitation device. This leads to the final issue discussed in this chapter.

Third, by investigating the different repair resources available to task-takers, this thesis was able to demonstrate the complexity involved in repair episodes. Task-takers have a number of different resources available to them, making it difficult to understand repair

from any monolithic standpoint. As Section 5.3 has shown, the sequence and success of repair episodes is largely contingent on variables such as who is initiating the repair, and the level of explicitness that follows. It can be said then that repair is highly complex, variable, and dynamic. Consequently, any comprehensive understanding of repairs must also be sensitive to the ways in which repairs occur. With this in mind, the following chapter will discuss how these key findings fit within a larger picture.

CHAPTER 6: DISCUSSION

This chapter will summarize the data discussed in Chapter 5, and establish important methodological and pedagogical implications. The first section of this chapter will attempt to link the literature established in Chapter 2 with the data analysis section. This section is centrally concerned with construct validity, and is divided into two subsections. The first subsection discusses the data in relation to turn-taking, while the second subsection discusses the data vis-à-vis repairs. The second section of this chapter will put these findings in a broader picture. Because it is by nature for conversation analytic studies to incorporate a great deal of discussion during data analysis, this chapter will be brief. However, when necessary, specific empirical examples from Chapter 5 will be given.

6.1 Summary of Data

As mentioned throughout this thesis, the construct validity of tasks is an important variable in task-based interaction research. As Section 5.1 has shown, predicting the interactional outcomes of tasks is a difficult endeavor. For instance, task-based interaction variation exists because there is a constant pull between task dimensions and task-takers' understanding of tasks (i.e., participatory structure of tasks and the idiosyncratic ways in which task-takers complete tasks). In other words, task-as-workplan does not always correspond to task-in-process (Breen 1987; Thorne 2005).

Although some of the tasks used in this thesis appear to have some influence on turn-taking and repair, important interactional distinctions must be made. For example, Section 5.2 showed how the opportunity to initiate and complete repairs is largely dependent on the participatory structure of tasks. Specific interactional rights are available to task-takers according to the distribution of referential information. For example, although one-way information gap tasks provide task-takers with more opportunities to repair RI trouble sources, it is the keeper of less information who is the primary repair initiator and the keeper of more information who is the primary repairer.

There is also a large array of repair resources available to task-takers. These repair resources should be identified and differentiated. For example, repairs and the sequences of them, vary according to the interactants and repair position (Section 5.3.1), whether the repair initiations are explicit (Section 5.3.2), and the attention that both task-takers give communicative troubles (Section 5.3.3). These sections demonstrated the rich, variable, and dynamic ways in which task-taker repair; it also provides further evidence of the difficulties in classifying interactional episodes for the purpose of quantification (Fortune and Thorpe 2001 make a similar claim in regard to the sociocultural approach to task-based interaction).

Accordingly, if a task is claimed to be beneficial to L2 acquisition because it promotes an abundance of repair episodes (i.e., construct validity as it is discussed in this thesis), such a claim must be scrutinized by identifying and differentiating what is being repaired, and how it is being repaired. For example, while some repairs may have direct L2 acquisition benefits (i.e., TI trouble sources; e.g., repairing syntactical errors), others may simply occur to complete a task's objectives (i.e., RI trouble sources; e.g., navigating through a map). It is the latter type of repair that does not appear to be beneficial to language development (Slimani-Rolls 2005; Swan 2005). The subsequent sections will elaborate on these issues.

6.1.1 Turn-taking

In the beginning of Chapter 2, it was claimed that all tasks posses some type of cause and effect inference. For example, tasks are thought to be beneficial because they are assumed to provide task-takers with some type of learning (Sayer 2005). However, Breen (1987) makes a clear distinction between task-as-workplan on the one hand, where the conceptualizations and generalizations of tasks take place, and task-in-process on the other, where the actual performance and outcomes occur. It should be quite clear by now that these two perspectives do not always correspond with each other. Furthermore, Ellis (2003) claims in his book length publication on tasks that tasks have generally been conceptualized from a task-as-workplan perspective. Because of this there is a large gap to fill in the task-based literature. Specifically, more task-in-process perspectives must be taken into consideration (Seedhouse 2005).

With these two factors in mind, can a task-based interaction study adopting a conversation analytic approach provide any insightful information? It is claimed that these findings do provide useful information. For example, much of the data provided in Chapter 5 have identified specific interactional and repair patterns, and their relationship

to an important task dimension (i.e., turn-taking, repair, and participatory structures). These findings have not been discussed in previous studies, and provide new ways to consider task-based interaction. Furthermore, the detail provided in this thesis provides much needed qualitative data to the quantitatively dominated literature. The remaining portion of this section will discuss the significance of these findings.

Section 5.1.1 claimed that the interaction occurring in the tasks used in this thesis were partly influenced by the participatory structure of tasks, and partly influenced by task-takers' understanding and interpretation of them (also see Section 2.2.2). This constant tension affected task-takers' ability to take turns, and initiate and complete repairs. Task-takers did, however, carry out tasks in varying degrees and ways. This resulted in task-in-process variation (see Section 5.1.3). Because task-in-process will vary from its task-as-workplan, coupled with the fact that tasks are understood largely from a task-as-workplan perspective, the issue of construct validity is an important issue in task-based interaction. How construct validity is related to the question of whether tasks encourage task-takers to repair will be discussed below. Before doing so, it would be prudent to discuss the significance of participatory structures and turn-taking.

The ways in which task-takers take turns were shown to be reflexively tied to the participatory structure of tasks. For example, Extract 11 demonstrated how turn-taking rights were allocated according to the distribution of referential information. The keeper of more information in Task 4, for instance, had the leverage to establish the interactional agenda. Conversely, much of the turns taken by the keeper of less information could be seen as aligning to this agenda. The floor, was in effect, controlled by the task-taker who possessed the information crucial to completing the task.

Though the participatory structure of tasks did influence turn-taking opportunities, it did not have the ability to control how task-takers complete tasks. Extracts 20 and 21, for

example, established how two different dyads completing an identical interactional agenda, do so in various ways. Whereas the former dyad made a missing referential object salient to their interaction, thereby extending the time and effort needed to complete the task, the latter dyad ignored this object and continued on to the next. While this case provided a clear example of how task-in-process varies, this variability is still confined within the distribution of referential information. For example, because keepers of more information do not know what referential information is missing in their partners' tasks, the communicative onus to make such referential issues salient is on keepers of less information.

Other task-in-process variation occurred at a less micro level. For instance, the task-in-process variation in Task 1 occurred as a result of task-takers' interpretation and understanding of task-as-workplan. In this task, task-takers were not only required to share personal characteristics, but also to 'get-to-know-each-other'. Whereas some task-takers put forth the effort to get acquainted and share personal characteristics, others completed the task with only the former objective at hand (i.e., the path of least resistance).

It can then be said that the participatory structure of tasks has a constant influence over the ways in which task-takers organize their turns. However, task-takers also have the ability, albeit within this turn-taking restraint, to deviate from task-as-workplan objectives. This task-as-workplan and task-in-process relationship, as it is related to turn-taking rights, was shown to be inherent in all of the tasks used in this thesis (for opinion gaps, see Section 5.1.3, for one-way information gaps, see Section 5.1.4, and for two-way information gaps, see Section 5.1.5). The relevance of this to the construct validity of tasks is two-fold.

First, by reconciling task perspectives, this thesis was able to identify any variables that may influence task-based interaction. In this case, the participatory structure of tasks, and task-takers' understanding and interpretation of tasks, were shown to be major contributors to task-based interaction. As hypothesized in previous studies that adopt a more task-as-workplan perspective (see Ellis 2000, 2003, and Skehan 2003 for an overview), participatory structures, such as one- and two-way information gaps, can influence the way task-takers interact. The current findings confirm this influence, but the details that were borne out in Chapter 5 also provide a clearer, more comprehensive picture. Specifically, the way referential information is distributed to task-takers will have an affect on turn-taking rights. This will invariably change the way task-takers repair as well (see the next section). It is believed that this level of task-in-process detail is needed in order to validate any task-as-workplan assumption.

Again, construct validation entails analyzing the relationship between cause and effect (see Section 2.2). As Zeller and Carmines (1980, p. 81) stress, "...the empirical relationship between the measures of the concepts must be examined." In other words, to see whether a task does what it is claimed to do. This thesis was not only able to describe and differentiate between the variations occurring in task-based interaction (e.g., referential information and turn-taking), but also explain why deviations took place (e.g., reflexive relationship between task-as-workplan and task-in-process).

Second, by accomplishing steps one and two to construct validation (see the paragraph above), this thesis was able to clarify how tasks, as conceptualized from a task-as-workplan perspective, correlate with its task-in-process. This leads to the third and final step to construct validation. As step three to construct validity states, "...the empirical evidence must be interpreted in terms of how it clarifies the construct validity of the particular measure" (Zeller and Carmines 1980, p. 81). This was accomplished by

examining the assumption that certain tasks provide task-takers with many opportunities to repair (see below).

In summation to this section, the dynamic relationship between task-as-workplan and task-in-process is precisely the type of data that cannot be gleaned when disregarding the details of task-in-process. It is for this reason that the reconciliation approach to task perspectives is an appropriate mode of analysis for task-based interaction, and the construct validity of tasks (see Section 2.2.2). As mentioned before, construct validity is discussed in this thesis as it is related to a task's ability to encourage task-takers to repair. This will be discussed in the subsequent section.

6.1.2 Repairs in tasks

The Input-Interaction interpretation of tasks was chosen as a point of reference for this thesis because it is very influential in the task-based literature (see Section 2.3). As shown in Sections 2.4 and 2.5, this perspective assumes that certain task characteristics provide an abundance of repair opportunities (Doughty & Pica 1986). Put in another way, task dimensions, such as information gaps, *cause* task-takers to repair for communication breakdowns (the *effect*). Although it was not the purpose of analysis to quantify occurrences of repair and question this Input-Interaction claim, several important findings have been made.

Before outlining these findings, it should be noted that the section on repair in Chapter 5 was divided into two main subsections. The first subsection investigated whether tasks encourage task-takers to repair. The second subsection showed how despite the influential properties of participatory structures, the repairs that did occur were variable and dynamic. The upshot of these subsections is that it can be safely said that if quantification of repair episodes is necessary to validate some preconceived notion of language learning, such analysis must differentiate between repairs that occur as a result

of referential information (RI trouble source), and repairs that occur as a result of task-taker trouble (TI trouble source). After all, the reasons for repairing these two trouble sources are vastly different (Foster & Ohta 2005). The remaining portion of this section will attempt to summarize these reasons.

First, it is important to remember that this thesis is centrally concerned with the construct validity of tasks. In regard to the literature outlined in Chapter 2, this thesis is attempting to reconcile task-as-workplan and task-in-process. The claim put forth by Input-Interaction task-based researchers (i.e., task characteristics affect the NfM), however accurate it may be, fail to account for the variable and dynamic qualities of task-in-process.

Section 5.2.1 identified an important repair variable in task-based interaction that must be taken into consideration. That is, repair episodes are induced from two different trouble sources. The first trouble source was identified as being referentially induced (RI trouble source), and the second, task-taker induced (TI trouble source). The former trouble source occurs when the message of utterances or task objectives are in question (NB. van Lier's 1988 taxonomy of trouble sources uses the terms message-oriented and activity-oriented for RI trouble sources). The latter trouble source occurs when the form of utterances are problematic (NB. trouble sources can be both RIs and TIs; see Section 5.2.1).

The significance of these variables is that they begin to take into consideration the variable and dynamic ways in which task-takers repair (Kasper 1985). The upshot of distinguishing between trouble sources in repair episodes is a more accurate account of how task dimensions influence task-in-process. For example, two-way gaps appear to provide little opportunities to repair RI trouble sources, whereas one-way gaps appear to shift the attention to repairing such troubles.

Furthermore, there were virtually no repairs of RI trouble sources in the interaction occurring in any of the two-way gap tasks (opinion and information) used in thesis, and very few instances for TI trouble sources. Quantitatively speaking this may lead some to believe that two-way gap tasks are not beneficial to language acquisition. However, upon closer examination these tasks can be seen as extremely beneficial to language development because of its extended, and complex sequences of interaction. In addition, the fact that the repairs for TI trouble sources that did occur in these tasks were, by and large, self-initiated self-repairs, indicates that the communicative preference was similar to those found in more casual, social settings (Schegloff *et al.* 1977). Nakahama *et al.*'s (2001) come to a similar conclusion in their investigation into opinion gap tasks; they conclude that although repair episodes were not in abundance, the complex language production appeared to be more conducive for language development.

In regard to the construct validity of tasks, these findings confirm the notion that opinion gap tasks do not provide task-takers with many opportunities to repair (see Section 2.5.3). Nevertheless, opinion gap tasks should not be considered impoverished since they do in fact provide task-takers with the opportunity to communicate in a more fluid, extended manner. Aston (1986, pp. 140-141) takes this thought a step further, and asks "...to what extent it is valid pedagogical practice to place learners in particular trying situations, in which negotiations will be maximized. Do they not risk being discouraged by excessive difficulty, feeling that their chances of interacting 'normally' in the target language are few and far between?" This quote highlights the point that an understanding of task-based interaction from a task-as-workplan perspective (e.g., understanding task-in-process as isolated episodes of talk) does not always provide a clear and comprehensive picture of task-based interaction. It can also be recalled that in Extract 32 excessive repair episodes is not always beneficial. Furthermore, excessive repair of

lexically based communicative breakdowns do not provide long-term language development (Slimani-Rolls 2005; Foster & Ohta 2005).

Although the fact that two-way opinion gap tasks and their inability to promote many opportunities to repair may have high construct validity, other tasks used in this thesis indicate that this relationship may not be as straightforward as it seems. For instance, the interaction occurring in tasks are not only influenced by participatory structures, but also task-takers' reflexive understanding and interpretation of them.

For instance, the two-way information gap tasks used in this thesis required task-takers to accomplish different task objectives (Task 1 required task-takers to discuss personal characteristics, whereas Task 5 required syntactic analysis). The objective of Task 1 was to convey a message, whereas the objective of Task 5 was to discuss the form of language. Despite the clear difference in task objectives, the interaction occurring in both tasks resulted in very few repairs of RI trouble sources. It is believed that this is a result of task-takers' ability to 'interpret and transform' task objectives (Mondada and Pekarek Doehler 2004). That is to say, task-takers are not always at the mercy of task dimensions.

However, upon closer examination, the repairs occurring in both the two-way opinion gap and two-way information gap tasks are similar. That is, the repairs that did occur in both types of tasks, though relatively infrequent, were largely self-initiated self-repairs of TI trouble sources. As a result, it can be said with a fairly high level of confidence that the even distribution of referential information two-way participatory structures (cf. one-way information gap) compel task-takers to 'get the message across' (i.e., it appears that these task-takers are not attending to form; see Gass *et al.* 2005).

Lastly, the interactional influence participatory structures have on repairs is highlighted by the one-way information gap tasks used in this thesis. Because these types of tasks possess a keeper of less information (i.e., a task-taker who does not have the

necessary information to complete the task), the ability to initiate and complete repairs is restricted (see Section 5.2.3). Furthermore, the repairs occurring in one-way information gap tasks are primarily for RI trouble sources. This trend is a result of the fact that the uneven distribution of information forces task-takers to focus and negotiate referential information (cf. two-way participatory structures provide an open discourse environment).

With these findings in mind, the participatory structures of tasks have high construct validity in regard to their ability to compel task-takers to repair for RI or TI trouble sources. However, the ability to initiate and complete repairs will be restricted according to the distribution of referential information. It should also be remembered that Section 5.1.3 demonstrated that it is ultimately task-takers' reflexive understanding and interpretation of task dimensions that shape the ensuing task-based interaction.

Though task-as-workplan may provide some insight into task-in-process (e.g., whether task-takers will repair for RI or TI trouble sources), repair is variable and dynamic. That is to say, attention must also be given to the fact that repair episodes possess different interactional and sequential properties (Section 5.3.1), provide task-taker with different levels of explicitness (Section 5.3.2), and result in different series of exchanges (Section 5.3.3), all of which effect the turn-by-turn realities of task-based interaction.

Section 5.3, as the previous paragraph has shown, is concerned with identifying the interactional characteristics of repair episodes. The purpose of this section was to illustrate how despite the fairly systematic patterns of repairs that occur as a result of participatory structures, repairs are much too intricate to gloss over by some numerical sum. In other words, interaction, and the characteristics of it, play a significant factor in what repairs are, and how they occur.

For instance, though more repairs for RI trouble sources occur in one-way information gap tasks than two-way information gap tasks, it is the keeper of less information that has the communicative onus to initiate the repair for referential information (see Sections 5.2 and 5.3.1). That is, the ability to initiate and complete repairs is dictated by how much referential information task-takers possess.

In conclusion, participatory structures have high construct validity in regard to their ability to influence *what type* repairs may occur in task-based interaction (i.e., RI versus TI trouble source). However, as Chapters 2, 3, 5, and 6 have shown, the methodology of quantification is far from conclusive in its ability to capture the variable and dynamic ways task-takers repair. Therefore, the methodology of quantifying repair episodes is weak in its ability to describe *how* repairs occur in task-based interaction. In other words, any attempt to reconcile task perspectives must go beyond the limited role a task-as-workplan perspective to data analysis provides. Because two task perspectives exist, it is prudent to account for both, and not just one of them.

6.2 Implications

Throughout this thesis it has been claimed that reconciling task perspectives is of paramount concern. Whereas Chapter 2 introduced the literature as to why task perspectives is an important variable in task-based interaction, Chapter 5 provided data that illustrated the indexical and reflexive nature of turn-taking and repair. The previous sections established how these two issues are related to each other. As a result, a great deal of implications have already been discussed. Bearing this in mind, only a brief summary of the main methodological implications of this thesis will follow.

Because task-in-process is an intricate system of interactional features, it is difficult to say *a priori* that task-based interaction will occur in any particular way. Put in another

way, this thesis states that in order to maintain a high-level of construct validity, task-based interaction data must take into consideration task-as-workplan and task-in-process.

As Yule, Powers, & Macdonald (1992) have stated in regard to communicative effectiveness, an understanding of tasks must go beyond task-as-workplan. Breen (1987) also maintains that task-takers have at their disposal the opportunity to deviate from what is identified as central to a specific task objective (see also Bygate *et al.* 2001a). As the data provided in Chapter 5 have shown, it is not a question of 'if task-takers will deviate from task objectives', but 'how and why task-takers deviate from task objectives'. In order to understand why task-as-workplan does not always correspond to task-in-process, attention must be paid to how task-taker "...processes [are] involved in reaching the outcome" (Ellis 2003, p. 8).

Although general interactional assumptions can be made from a task-as-workplan perspective (e.g., one-way tasks provide more opportunities to repair referential information), researchers must be aware that there is much more involved in task-based interaction than say, an abundance of repair episodes. As this thesis has demonstrated, repair is a resource that is reflexively tied to task dimensions and task-takers (Gass *et al.* 2005). This phenomenon leads to task-in-process variation. It is for this reason that task-based interaction researchers should concern themselves with a better understanding of task-in-process.

Although CA is a particularly useful tool for analyzing task-in-process, other qualitative methodologies are available and necessary for investigating task perspectives (see Richards 2003). Because the TBLT literature is largely quantitative, taken from a task-as-workplan perspective (Seedhouse 2005), more attention must given to the qualities of interaction. However, the TBLT literature would not benefit from a complete pendulum swing (i.e., focusing exclusively on task-in-process). What is also needed is an

account of how task-in-process relates to task-as-workplan. Therefore, a more prudent methodological measure would be to take a step further towards adopting a multidisciplinary approach to task perspectives.

On a final methodological note, this thesis should be not interpreted as a riposte to task-based interaction researchers working under the Input-Interaction framework. It is important to remember that this thesis is centrally concerned with forwarding the claim Breen (1987) made almost twenty years ago. That is, two perspectives exist in task-based interaction, and any comprehensive, accurate, and valid interpretations of them are contingent on the reconciliation of task-as-workplan and task-in-process (see Thorne 2005 for a discussion on how task-based interaction can be taken from different vantage points). As said on numerous occasions, this is at the heart of a task's construct validity. The following section will now outline some pedagogical implications.

6.2.1 Pedagogical implications

Because the tasks investigated in this thesis occurred outside of a classroom, the following implications should be interpreted with caution (see, however, Gass *et al.* 2005, who found classroom and laboratory task-based interaction to be similar). It should also be noted that pedagogical implications were neither originally conceived, nor fundamental during the initial stages and completion of this thesis, though some can be made in regard to turn-taking and repair.

First, one-way information gap tasks restrict turn-taking opportunities. This has important pedagogical implications for classroom language teachers. If a quiet, more introverted student is paired with a talkative, more extroverted student, for instance, then selecting who will be the keeper of less information and who will be the keeper of more information becomes a crucial variable in the successful process and completion of the task. In regard to turn-taking rights, it can be speculated that the introverted student

responsible for maintaining the interaction agenda may be in a less comfortable position, thereby obstructing full learning potential. Conversely, it can also be said that this may be precisely the type of interactional role more introverted students need in order to develop communicative skills and overcome affective barriers.

Second, one-way information gap tasks also restrict repair opportunities. It can be recalled that the keeper of less information in one-way information gap tasks has the communicative onus to initiate repairs of referential problems. Using the same example as above, less confrontational or introverted students may have a difficult time interrupting the flow of communication to display nonunderstanding. Therefore, if the efficacy of a task is dependent on an abundance of repair episodes, it is important for teachers to be cognizant of what type of task-taker is in the position of keeper of less information.

Lastly, according to the findings of this thesis, two-way gap tasks (opinion and information) require task-takers to be more competitive in who initiates and maintains the floor. These types of tasks are similar to more casual, social conversations in that they contain a more open style of discourse. This is represented by longer stretches of individual, overlapping talk, and more communicative focus on 'getting-the-message-across'. In regard to repairs, troubles in communication are largely ignored unless they are self-repaired or obstruct the meaning of a message. Consequently, teachers concerned with fluency-based activities may find two-way gap tasks particularly useful.

From the examples above it should be clear now that participatory structures have a role in selecting and assigning task responsibilities. It is the distribution of referential information that may change the dynamics of task-based interaction. Now that the methodological and pedagogical implications have been discussed, conclusions will be made in the next chapter.

CHAPTER 7: CONCLUSION

This chapter will make final conclusions in regard to the literature and data presented in earlier chapters. Each research question will be represented, followed by a brief summation of salient points. The chapter will conclude with some suggestions for further research.

7.1 Research Questions

This thesis has presented three research questions, each of which will be summarized in this section. The first research question asked, "What interactional influence does a task-as-workplan have on a task-in-process?" Because construct validity was being investigated vis-à-vis tasks (task-as-workplan) and their ability to encourage task-takers to repair (task-in-process), this first research question was set forth to better understand the relationship between task perspectives. This is an important matter for researchers working outside of TBLT and CA given that tasks are a common form of data elicitation for both educators and applied linguists (see Section 6.2). In order to answer this question, task-in-process was first analyzed for any noteworthy interactional trends (Hutchby & Wooffitt 1998). It was later discovered that sequences of turns were influenced by a particular task-as-workplan dimension. Specifically, because participatory structures provide varying degrees of information to task-takers, some task-takers have limited turn-taking rights (e.g., one-way information gap tasks). However, it was also shown that task-in-process will vary according to task-takers' understanding and interpretation of task-as-workplan. This relationship highlighted the importance in reconciling task perspectives.

The second research questions asked, "Do tasks encourage task-takers to repair?" This question was answered by first identifying two types of trouble sources. Doing so provided a more detailed account of whether tasks encourage task-takers to repair. For instance, two-way participatory structures (opinion and information gap) were shown to provide more opportunities to repair for communicative troubles than referential troubles, whereas one-way information gap tasks provide more opportunities to repair for referential information (cf. the conflicting task-based findings presented in Section 2.5.3).

In regard to the first research question, participatory structures were also shown to influence task-takers' ability to initiate and complete repairs.

The third research question asked, "What repair resources do task-takers use in task-based interaction?" The purpose of this research question was to present how repairs are conducted in a rich, variable, and dynamic way (see He 2004). This endeavor also underscores Foster and Ohta's (2005, p. 408) claim that "If NfM facilitates SLA, then finding out where, how, and why it happens and what kinds of interactional adjustments it might provoke, are all valid research questions; these questions require the researcher to identify correctly where learners attempt to repair a communication breakdown."

The person initiating and completing repairs, as well as the explicitness of repairs, for instance, were shown to be both interrelated (see Sections 5.3.1 and 5.3.2). Furthermore, as the two previous questions have highlighted, participatory structures also influence turn-taking and repair. It is invariably of utmost importance to differentiate between who is initiating and completing repairs, and what type of effort is being put forth to accomplish these repairs. The underlying reason for presenting these data was to show how the interactional contexts in which repairs occur are both indexical and reflexive, thereby rendering any preconceived interpretations or predictions of them ambiguous.

When the findings for each research question are taken into consideration, concepts such as task-as-workplan and task-in-process become important variables to the investigation of task-based interaction. However, current interpretations of tasks are overwhelmingly taken primarily from a task-as-workplan perspective (Seedhouse, 2005; Littlewood, 2004; Ellis 2003). Seedhouse (2005) claims that limiting interpretations and understandings of tasks from a task-as-workplan perspective poses serious threats to the validity of tasks; he proposes an analytical shift to a more task-in-process perspective. The point of departure for this thesis is that not only did the current analysis initially and

predominately focus on task-in-process, but task-as-workplan and task-in-process were also reconciled. This was done by identifying the relationship between participatory structures on the one hand (task-as-workplan), and turn-taking and repair on the other (task-in-process).

Yet, it is safe to assume that there are many other task-as-workplan-task-in-process interplays (e.g., the presence of a teacher and task-talk). The ability to assess the efficacy of tasks is contingent on the correlation between these two perspectives (Breen 1987). Again, reconciling the cause and effect variables of task-based interaction is crucial to ensuring construct validity (N.B. Chapter 6 has already discussed the importance of this concept in regard to the data, and researchers working outside of the adopted methodology).

Construct validity was investigating in this thesis by examining whether tasks encourage task-takers to repair. It was shown that participatory structures have high construct validity in regard to their ability to determine the interactional focus (e.g., referential information in one-way information gap tasks versus freely communicating ideas in two-way participatory structures). This imposed focus resulted in different quantities and types of repair (i.e., repairs for TI and RI trouble sources). Furthermore, the ability to initiate and maintain turns and repairs were dependent on participatory structures. More importantly, discovering this relationship was only possible through the process of reconciling task perspectives. It is this premise that will be the highlight of the next section.

7.2 Further Research

In the constant pull between methodological approaches to task-based data (Seedhouse 2005), suggestions are made and criticisms are put forward (e.g., quantification versus qualification). This thesis has attempted to avoid much of the prescriptions made as a

result of outlining a particular research approach. Task-as-workplan and task-in-process, for example, are two perspectives available to task-based interaction researchers. The data presented in this thesis have included both perspectives because (1) the interaction between task-as-workplan and task-in-process is real, and not merely methodological hearsay (Thorne 2005); that is, the idea that task perspectives exist transcends any adopted methodological approach; and (2) subscribing to only one perspective limits the ability to comprehensively account for task-based interaction.

Both of these justifications for accounting for task-as-workplan and task-in-process concern the accountability achieved through data analysis. For example, though CA does not traditionally account for data outside of an interactional context (task-in-process), it must account for task-as-workplan in order to paint a complete picture of task-based interaction. As shown in this thesis, task-as-workplan can influence the interactional context (e.g., participatory structure and turn-taking). Conversely, examining task-based interaction from a task-as-workplan, though potentially beneficial in validating the language development worth of tasks, falls short in accounting for the intricate ways in which task-takers communicate and repair. With this in mind, it is important to remember that it is ultimately the task-takers who determine task-in-process (Willis 1996; Slimani-Rolls 2005; Seedhouse 2004; 2005; Thorne 2005).

It is for these reasons that this thesis is suggesting that future task-based interaction work take into consideration and reconcile both task perspectives. The fact that deviations occur between task-as-workplan and task-in-process underscores the importance in reconciling task perspectives. Put in another way, the cause and effect assumptions inherent in all tasks must be scrutinized. Investigating the dynamic interplay between these variables will help provide a more holistic and tangible interpretation of task-based interaction (e.g., Mondada & Pekarek Doehler 2004; Mori 2004; Slimani-

Rolls 2005). The data presented in this thesis has contributed to the move towards this approach, though future research must take into consideration other task-as-workplan and task-in-process variables (e.g., task outcomes and linguistic complexity).

REFERENCES

Aston, G. (1986) 'Trouble-shooting in interaction with learners: The more the merrier?' Applied Linguistics Vol. 7, 2 pp 128-143

Atkinson, J.M., & Heritage, J. (1984) Structures of Social Interaction Cambridge, UK: Cambridge University Press

Block, D. (2003) The Social Turn in Second Language Acquisition Edinburgh, UK: Edinburgh University Press

Bitchener, J. (2004) 'The relationship between the negotiation of meaning and language learning: A longitudinal study' Language Awareness Vol. 13, 2 pp 81-95

Boyle, R. (2000) 'Whatever happened to preference organisation?' Journal of Pragmatics Vol. 32, 5 pp 583-604

Breen, M. P. (1987) 'Learner contributions to task design' in C. N. Candlin, & Murphy, D., Lancaster Practical Papers in English Language Education: Language Learning Tasks London: Prentice-Hall International, pp 23-46

Breen, M.P. (1989) 'The evaluation cycle for language learning tasks' in R.K. Johnson, The Second Language Curriculum Cambridge, UK: Cambridge University Press, pp 187-206

Brooks, F. B. (1992) 'Can we talk?' Foreign Language Annals Vol. 25, 1 pp 59-71

Bygate, M. (2001) 'Effects of task repetition on the structure and control of oral language' in M. Bygate, Skehan, P., & Swain, M., Researching Pedagogic Tasks: Second Language Learning, Teaching, and Testing Essex, UK: Addison Wesley Longman, pp 23-48

Bygate, M., Skehan, P., & Swain, M. (2001a) 'Introduction' in M. Bygate, Skehan, P., & Swain, M., Researching Pedagogic Tasks: Second Language Learning, Teaching, and Testing Essex, UK: Addison Wesley Longman, pp 1-20

Bygate, M., Skehan, P., & Swain, M. (2001b) Researching Pedagogic Tasks: Second Language Learning, Teaching, and Testing Essex, UK: Addison Wesley Longman

Candlin, C. N. (1987) 'Towards task-based language learning' in C. N. Candlin, & Murphy, D., Lancaster Practical Papers in English Language Education: Language Learning Tasks London: Prentice-Hall International, pp 5-22

Clayman, S. E., & Maynard, D.W. (1995) 'Ethnomethodology and conversation analysis' in P. Have ten, & Psathas, G., Situated Order: Studies in The Social Organization of Talk and Embodied Activities Washington, DC: International Institute for Ethnomethodology and Conversation Analysis, pp 1-30

Cook, V (1975) 'Strategies in the comprehension of relative clauses' Language and Speech Vol. 18, pp 204-212

Coughlan, P., & Duff, P.A. (1994) 'Same task, different activities: Analysis of SLA task from an activity theory perspective' in J. P. Lantolf, & Appel, G., Vygotskian approaches to Second Language Research Westport, CT: Ablex Publishing Corporation, pp 173-193

Day, R. R., Chenoweth, N.A., Chun, A.E., & Luppescu, S. (1984) 'Corrective feedback in native-nonnative discourse' Language Learning Vol. 34, 2 pp 19-45

de Guerrero, M. C. M. (1994) 'Form and functions of inner speech in adult second language learning' in J. P. Lantolf, & Appel, G., Vygotskian approaches to Second Language Research Westport, CT: Ablex Publishing Corporation, pp 83-115

Doughty, C. J., & Long, M.H. (2003) 'Optimal psycholinguistic environments for distance foreign language learning' Language Learning & Technology Vol. 7, 3 pp 50-80

Doughty, C. J., & Pica, T. (1986) '"Information Gap" tasks: Do they facilitate second language acquisition?' TESOL Quarterly Vol. 20, 2 pp 305-325

Doughty, C. J., & Williams, J. (1998a) Focus on Form in Classroom Second Language Acquisition Cambridge, UK: Cambridge University Press

Doughty, C. J., & Williams, J. (1998b) 'Issues and terminology' in C. J. Doughty, & Williams, J., Focus on Form in Classroom Second Language Acquisition Cambridge, UK: Cambridge University Press, pp 1-11

Drew, P., & Heritage, J. (1992) Talk at work: Interaction in institutional settings Cambridge, UK: Cambridge University Press

Drew, P. (1997) "Open' class repair initiator in response to sequential sources of troubles in conversations' Journal of Pragmatics Vol. 28, pp 69-101

Duff, P. A. (1986) 'Another look at interlanguage talk: Taking task to task' in R. R. Day, Talking to Learn: Conversation in Second Language Acquisition Rowley, MA: Newbury House Publishers, pp 147-181

Duff, P. A. (1993) 'Tasks and interlanguage performance: An SLA perspective' in S. M. Gass, & Crookes, G., Tasks and Language Learning Bristol, PA: Multilingual Matters, pp 57-95

Dufficy, P. (2004) 'Predisposition to choose: The language of an information gap task in a multilingual primary classroom' Language Teaching Research Vol. 8, 3 pp 241-261

Egbert, M. M. (1998) 'Miscommunication in language proficiency interviews of first-year German students: A comparison with natural conversation' in R. Young, & He, A.W., Talking and Testing: Discourse Approaches to the Assessment of Oral Proficiency Amsterdam: John Benjamins Publishing, pp 147-169.

Ellis, N. C. (1995) 'Consciousness in second language acquisition: A review of field studies and laboratory experiments' Language Awareness Vol. 4, 3 pp 123-146

Ellis, R. (1994) The Study of Second Language Acquisition Oxford, UK: Oxford University Press

Ellis, R. (2000) 'Task-based research and language pedagogy' Language Teaching Research Vol. 4, 3 pp 193-220

Ellis, R. (2003) Task-based Language Learning and Teaching Oxford, UK: Oxford University Press

Ellis, R., Basturkmen, H., & Loewen, S. (2001) 'Preemptive focus on form in the ESL classroom' TESOL Quarterly Vol. 35, 3 pp 407-432

Ferguson, C. A. (1975) 'Toward a characterization of English foreign talk' Anthropological Linguistics Vol. 17, 1 pp 1-14

Firth, A., & Wagner, J. (1997) 'On discourse, communication, and (some) fundamental concepts in SLA research' The Modern Language Journal Vol. 81, 3 pp 285-300.

Fortune, A., & Thorp, D. (2001) 'Knotted and entangled: New light on the identification, classification and value of language related episodes in collaborative output tasks' Language Awareness Vol. 10, 2&3 pp. 143-160

Foster, P., & Ohta, A.S. (2005) 'Negotiation for meaning and peer assistance in second language classrooms' Applied Linguistics Vol. 26, 3 pp 402-430

Gallaway, C., & Richards, B.J. (1994) Input and Interaction in Language Acquisition Cambridge, UK: Cambridge University Press

Garfinkel, H. (2002) Ethnomethodology's Program: Working Out Durkeim's Aphorism Oxford, UK: Rowman & Littlefield Publishers

Garfinkel, H., & Sacks, H. (1986) 'On formal structures of practical actions' in H. Garfinkel, Ethnomethodological Studies of Work New York: Routledge and Kegan Paul, pp 160-193

Gass, S. M. (2004) 'Commentaries: Conversation Analysis and Input-Interaction' The Modern Language Journal Vol. 88, 4 pp 597-602

Gass, S.M., Mackey, A. & Ross-Feldman, L. (2005) 'Task-based interactions in classroom and laboratory settings' Language Learning Vol. 55, 4 pp 575-611

Gass, S.M., & Selinker, L. (2001) Second Language Acquisition Mahwah, NJ: Lawrence Erlbaum Associates

Gass, S. M., & Varonis, E.M. (1985a) 'Variation in native speaker speech modification to non-native speakers' Studies in Second Language Acquisition Vol. 7, 1 pp 37-57

Gass, S. M., & Varonis, E.M. (1985b) 'Task variation and NNS/NNS negotiation of meaning' in S.M. Gass, & Madden, C., Input and Second Language Acquisition Rowley, MA: Newbury House Publishers, pp 149-161

Gass, S. M., & Varonis, E.M. (1986) 'Sex differences in NNS/NNS interactions' in R. R. Day, Talking to Learn: Conversation in Second Language Acquisition Rowley, MA: Newbury House Publishers, pp 327-351

Gass, S. M., & Varonis, E.M. (1994) 'Input, interaction, and second language production' Studies in Second Language Acquisition Vol. 16, 3 pp 283-302

Green, J. L., & Dixon, C.N. (2002) 'Exploring differences in perspectives on microanalysis of classroom discourse: Contributions and concerns' Applied Linguistics Vol. 23, 3 pp 393-406

Gonzalez-Lloret, M. (2003) 'Designing task-based CALL to promote interaction: En busca de esmeraldas' Language Learning & Technology Vol. 7, 1 pp 86-104

Hall, J. K. (2004) 'Commentaries: Language learning as an interactional achievement' The Modern Language Journal Vol. 88, 4 pp 607-611

Hammersley, M. (2003) 'Conversation analysis and discourse analysis: methods or paradigms?' Discourse & Society Vol. 14, 6 pp 751-781

Hatch, E.M. (1978) 'Apply with caution' Studies in Second Language Acquisition Vol. 2, pp 123-143

Hatch, E.M. (1983) Psycholinguistics: A second language perspective Rowley, MA: Newbury House Publishers

Hauser, E.K. (2003) 'Corrective recasts' and other-correction of language form in interaction among native and non-native speakers of English: The application of conversation analysis to second language acquisition Honolulu, Hawaii: Unpublished PhD dissertation

He, A. W. (2004) 'CA for SLA: Arguments from the Chinese language classroom' The Modern Language Journal Vol. 88, 4 pp 568-582

Heritage, J. (1984) Garfinkel and Ethnomethodology Cambridge, UK: Polity Press

Heritage, J., & Atkinson, J.M. (1984) Structures of Social Action Cambridge, UK: Cambridge University Press

Hutchby, I., & Wooffitt, R. (1998) Conversation Analysis Malden, MA: Blackwell Publishers

Iwashita, N. (2003) 'Negative feedback and positive evidence in task-based interaction' Studies in Second Language Acquisition Vol. 25, 1 pp 1-36

Jefferson, G. (1984) 'On exposed and embedded correction in conversation' in G. Button, & Lee, J., Talk and Social Organisation Clevedon, PA: Multilingual Matters, pp 86-100

Kasper, G. (1985) 'Repair in foreign language teaching' Studies in Second Language Acquisition Vol. 7, 2 pp 200-215

Kasper, G. (2004) 'Participant orientations in German conversation-for-learning' The Modern Language Journal Vol. 88, 4 pp 551-567

Kiernan, P. J., & Aizawa, K. (2004) 'Cell phones in task based learning: Are cell phones useful language learning tools?' ReCALL Vol. 16, 1 pp 71-84

Korobov, N. (2001) 'Reconciling theory with method: From conversation analysis and critical discourse analysis to positioning analysis' Forum: Qualitative Social Research Vol. 2, 3 pp [online journal]

Krashen, S.D. (1982) Principles and Practice in Second Language Acquisition Oxford, UK: Pergamon

Kumaravadivelu, B. (1991) 'Language-learning tasks: Teacher intention and learner interpretation' ELT Journal Vol. 45, 2 pp 98-107

Lantolf, J. P., & Appel, G. (1994) 'Theoretical framework: An introduction to Vygotskian approaches to second language research' in J. P. Lantolf, & Appel, G., Vygotskian approaches to Second Language Research Westport, CT: Ablex Publishing Corporation, pp 1-32

Larsen-Freeman, D. (1989) 'Pedagogical descriptions of language: Grammar' Annual Review of Applied Linguistics Vol. 10, pp 187-195

Larsen-Freeman, D. (2004) 'Commentaries: CA for SLA? It all depends...' The Modern Language Journal Vol. 88, 4 pp 603-607

Larsen-Freeman, D., & Long, M.H. (1991) An Introduction to Second Language Acquisition Research Essex, UK: Pearson Education

Lazaraton, A. (2004) 'Gesture and speech in the vocabulary explanations of one ESL teacher: A microanalytic inquiry' Language Learning Vol. 54, 1 pp 79-117

Li, W. (2002) "What do you want me to say?' On the conversation analysis approach to bilingual interaction' Language in Society Vol. 31, 2 pp 159-180

Liebscher, G., & Dailey-O'Cain, J. (2003) 'Conversational repair as a role-defining mechanism in classroom interaction' The Modern Language Journal Vol. 87, 3 pp 375-390

Lindemann, S. (2002) 'Listening with an attitude: A model of native-speaker comprehension of non-native speakers in the United States' Language in Society Vol. 31, pp 419-441

Littlewood, W. (2004) 'The task-based approach: Some questions and suggestions' ELT Journal Vol. 58, 4 pp 319-326

Long, M. H. (1980) Input, Interaction, and Second Language Acquisition University of California, Los Angeles: Los Angeles

Long, M. H. (1981) 'Input, interaction, and second-language acquisition' in H. Winitz, Native Language and Foreign Language Acquisition. Annals of the New York Academy of Sciences pp 259-278

Long, M. H. (1983a) 'Native speaker/non-native speaker conversation and the negotiation of comprehensible input' Applied Linguistics Vol. 4, 2 pp 126-141

Long, M. H. (1983b) 'Linguistic and conversational adjustments to non-native speakers' Studies in Second Language Acquisition Vol. 5, 2 pp 177-193

Long, M.H. (1988) 'Instructed interlanguage development' in L. Beebe, Issues in Second Language Acquisition: Multiple perspectives Rowely, MA: Newbury House, pp 115-141

Long, M. H. (1996) 'The role of the linguistic environment in second language acquisition' in W. C. Ritchie, & Bhatia, T.K., Handbook of Second Language Acquisition New York: Academic Press, pp 413-468

Long, M. H., & Porter, P.A. (1985) 'Group work, interlanguage talk, and second language acquisition' TESOL Quarterly Vol. 19, 2 pp 207-228

Long, M. H., & Robinson, P. (1998) 'Focus on form: Theory, research, and practice' in C. J. Doughty, & Williams, J., Focus on Form in Classroom Second Language Acquisition Cambridge, UK: Cambridge University Press, pp 15-41

Lynch, T., & Maclean, J. (2001) "A case of exercising': Effects of immediate task repetition on learners' performance' in M. Bygate, Skehan, P., & Swain, M., Researching Pedagogic Tasks: Second Language Learning, Teaching, and Testing Essex, UK: Addison Wesley Longman, pp 141-162

Lyster, R. (2004) 'Differential effects of prompts and recasts in form-focused instruction' Studies in Second Language Acquisition Vol. 26, 3 pp 399-432

Lyster, R., & Ranta, L. (1997) 'Corrective feedback and learner uptake' Studies in Second Language Acquisition Vol. 19, 1 pp 37-66

Mackey, A. (1999) 'Input, interaction, and second language development: An empirical study of question formation in ESL' Studies in Second Language Acquisition Vol. 21, 4 pp 557-587

Mackey, A., Oliver, R., & Leeman, J. (2003) 'Interactional input and the incorporation of feedback: An exploration of NS-NNS and NNS-NNS adult and child dyads' Language Learning Vol. 53, 1 pp 35-66

Magnan, S.S. (2004) 'From the editor: Presenting the special issue' The Modern Language Journal Vol. 88, 4 pp 489-490

Markee, N. (2000) Conversation Analysis Mahwah, NJ: Lawrence Erlbaum Associates

Markee, N. (2003) 'Qualitative guidelines: Conversation analysis' TESOL Inc. Available from: http://www.tesol.org [Accessed 19 April 2005]

Markee, N. (2004) 'Zones of interactional transition in ESL classes' The Modern Language Journal Vol. 88, 4 pp 583-596

Markee, N., & Kasper, G. (2004) 'Classroom talks: An introduction' The Modern Language Journal Vol. 88, 4 pp 491-500

Mayo, G., & del Pilar, M. (2001) 'Repair and completion strategies in the interlanguage of advanced EFL learners' ITL, Review of Applied Linguistics Vol. 131-132, pp 139-168

McHoul, A.W. (1990) 'The organization of repair in classroom talk' Language in Society Vol. 19, 3 pp 349-377

Mennin, P. (2003) 'Rehearsed oral L2 output and reactive focus on form' ELT Journal Vol. 57, 2 pp 130-138

Moerman, M. (1996) 'The field of analyzing foreign language conversations' Journal of Pragmatics Vol. 26, 2 pp 147-158

Mondada, L., & Pekarek Doehler, S. (2004) 'Second language acquisition as situated practice: Task accomplishment in the French second language classroom' The Modern Language Journal Vol. 88, 4 pp 501-518

Mori, J. (2004) 'Negotiating sequential boundaries and learning opportunities: A case from a Japanese language classroom' The Modern Language Journal Vol. 88, 4 pp 536-550

Morris, F. A., & Tarone, E.E. (2003) 'Impact of classroom dynamics on the effectiveness of recasts in second language acquisition' Language Learning Vol. 53, 2 pp 325-368

Murphy, J. (2003) 'Task-based learning: The interaction between tasks and learners' ELT Journal Vol. 57, 4 pp 352-360

Nakahama, Y., Tyler, A., & van Lier, L. (2001) 'Negotiation of meaning in conversational and informative gap activities: A comparative discourse analysis' TESOL Quarterly Vol. 35, 3 pp 377-405

Nunan, D. (2005) Designing Tasks for the Communicative Classroom Cambridge, UK: Cambridge University Press

Ochs, E. (1979) 'Transcription as theory' in E. Ochs, & Schieffelin, B., Developmental Pragmatics New York: Academic Press, pp 43-72

Ohta, A. S. (1995) 'Applying sociocultural theory to an analysis of learner-learner discourse: Learner-learner collaborative interaction in the zone of proximal development' Issues in Applied Linguistics Vol. 6, 2 pp 93-121

Ohta, A. S., & Nakaone, T. (2004) 'When students ask questions: Teacher and peer answers in the foreign language classroom' IRAL Vol. 42, 3 pp 217-237

Oliver, R., & Mackey, A. (2003) 'Interactional context and feedback in child ESL classrooms' The Modern Language Journal Vol. 87, iv pp 519-533

Oxford, R., Cho, Y., Leung, S., & Kim, H. (2004) 'Effect of the presence and difficulty of task on strategy use: An exploratory study' IRAL Vol. 42, 1 pp 1-47

Panova, I., & Lyster, R. (2002) 'Patterns of corrective feedback and uptake in an adult ESL classroom' TESOL Quarterly Vol. 36, 4 pp 573-595

Pica, T. (1987) 'Second language acquisition, social interaction and the classroom' Applied Linguistics Vol. 8, 1 pp 3-21

Pica, T., Young, R.F., & Doughty, C.J. (1987) 'The impact of interaction on comprehension' TESOL Quarterly Vol. 21, 4 pp 737-758

Pica, T. (1988) 'Interlanguage adjustments as an outcome of NS-NNS negotiated interaction' Language Learning Vol. 38, 1 pp 45-73

Pica, T. (1991) 'Classroom interaction, negotiation, and comprehension: Redefining relationships' System Vol. 19, 4 pp 437-452

Pica, T. (1994) 'Research on negotiation: What does it reveal about second-language learning conditions, processes, and outcomes?' Language Learning Vol. 44, 3 pp 493-527

Pica, T. (2005) 'Classroom learning, teaching, and research: A task-based perspective' The Modern Language Journal Vol. 89, 3 pp 339-352

Pica, T., & Doughty, C. (1985) 'The role of group work in classroom second language acquisition' Studies in Second Language Acquisition Vol. 7, 2 pp 233-248

Pica, T., Holliday, L., Lewis, N., Berducci, D., & Newman, J. (1991) 'Language learning through interaction: What role does gender play?' Studies in Second Language Acquisition Vol. 13, 3 pp 343-376

Pica, T., Kanagy, R., Falodun, J. (1993) 'Choosing and using communication tasks for second language instruction and research' in S. M. Gass, & Crookes, G., Tasks and Language Learning Bristol, PA: Multilingual Matters, pp 9-34

Pica, T., Lincoln-Porter, F., Paninos, D., & Linnell, J. (1996) 'Language learners' interaction: How does it address the input, output, and feedback needs of L2 learners?' TESOL Quarterly Vol. 30, 1 pp 59-84

Pica, T., & Washburn, G.N. (2002) 'Negative evidence in language classroom activities: A study of its availability and accessibility to language learners' Working Papers in Educational Linguistics Vol. 18, 1 pp 1-28

Pike, K. L. (1966) 'Etic and emic standpoints for the description of behavior' in A. G. Smith, Communication and Culture: Readings in The Codes of Human Interaction New York: Holt, Rinehart, and Winston, pp 152-163

Porter, P. A. (1986) 'How learners talk to each other: Input and interaction in task-centered discussion' in R. R. Day, Talking to Learn: Conversation in Second Language Acquisition Rowley, MA: Newbury House Publishers, pp 200-222

Prevignano, C.L., & Thibault, P.J. (2003) Discussing Conversation Analysis Amsterdam: John Benjimans Publishing Company

Psathas, G. (1995) Conversation Analysis: The Study of Talk-in-Interaction London: Sage Publications

Rawls, A.W. (2002) 'Editor's introduction' in H. Garfinkel, Ethnomethodology's Program: Working Out Durkeim's Aphorism Oxford, UK: Rowman & Littlefield Publishers

Richards, K. (2003) Qualitative Inquiry in TESOL Basingstoke, UK: Palgrave MacMillan

Richards, K., & Seedhouse, P. (2005) Applying Conversation Analysis Basingstoke, UK: Palgrave MacMillan

Robinson, P. (2005) 'Cognitive complexity and task sequencing: Studies in a componential framework for second language task design' IRAL Vol. 43, pp 1-32

Sacks, H. (1984) 'Notes on methodology' in J. M. Atkinson, & Heritage, J., Structures of Social Action Cambridge, UK: Cambridge University Press, pp 21-27

Sacks, H., Schegloff, E.A., & Jefferson, G. (1974) 'A simplest systematics for the organization of turn-taking for conversation' Language Vol. 50, 4 pp 696-735

Samuda, V., & Rounds, P.L. (1993) 'Critical episodes: Reference points for analyzing a task in action' in G. Crookes, & Gass, S.M., Tasks in a Pedagogical Context Bristol, PA: Multilingual Matters, pp 125-138

Sayer, P. (2005) 'An intensive approach to building conversation skills' ELT Journal Vol. 59, 1 pp 14-22

Schachter, J. (1986) 'Three approaches to the study of input' Language Learning Vol. 36, 2 pp 211-225

Schegloff, E. A. (1988) 'Description in the social sciences I: Talk-in-interaction' IPrA Papers in Pragmatics Vol. 2, 1-2 pp 1-24

Schegloff, E. A. (1992a) 'Repair after next turn: The last structurally provided defense of intersubjectivity in conversation' American Journal of Sociology Vol. 97, 5 pp 1295-1345

Schegloff, E. A. (1992b) 'On talk and its institutional occasions' in P. Drew, & Heritage, J., Talk at Work: Interaction in Institutional Settings Cambridge, UK: Cambridge University Press, pp 101-134

Schegloff, E. A. (1993) 'Reflections on quantification in the study of conversation' Research on Language and Social Interaction Vol. 26, 1 pp 99-128

Schegloff, E. A. (1997) 'Whose text? Whose context?' Discourse & Society Vol. 8, 2 pp 165-187

Schegloff, E. A., Jefferson, G., & Sacks, H. (1977) 'The preference for self-correction in the organization of repair in conversation' Language Vol. 53, 2 pp 361-382

Schegloff, E. A., Koshik, I., Jacoby, S., & Olsher, D. (2002) 'Conversation analysis and applied linguistics' Annual Review of Applied Linguistics Vol. 22, pp 3-31

Schiffrin, D. (1994) Approaches to Discourse Cambridge, MA: Blackwell Publishers

Schmidt, R., & Frota, S. (1986) 'Developing basic conversational ability in a second language: A case study of an adult learner of Portuguese' in R. Day, Talking to Learn: Conversation in Second Language Acquisition Rowley, MA: Newbury House, pp 237–326

Seedhouse, P. (1997) 'The case of the missing "No": The relationship between pedagogy and interaction' Language Learning Vol. 47, 3 pp 547-583.

Seedhouse, P. (1999a) 'Task-based interaction' ELT Journal Vol. 53, 3 pp 149-156

Seedhouse, P. (1999b) 'The relationship between context and the organisation of repair in the L2 classroom' IRAL Vol. 37, 1 pp 59-80

Seedhouse, P (2004) The Interactional Architecture of the Language Classroom: A Conversation Analysis Perspective Oxford: Blackwell Publishers

Seedhouse, P. (2005) '"Task" as research construct' Language Learning Vol. 55, 3 pp 533-570

Sheen, Y. (2004) 'Corrective feedback and learner uptake in communicative classrooms across instructional settings' Language Teaching Research Vol. 8, 3 pp 263-300

Shortreed, I. M. (1993) 'Variation in foreigner talk input: The effects of task and proficiency' in S. M. Gass, & Crookes, G., Tasks and Language Learning Bristol, PA: Multilingual Matters, pp 96-122

Skehan, P. (2001) 'Tasks and language performance assessment' in M. Bygate, Skehan, P., & Swain, M., Researching Pedagogic Tasks: Second Language Learning, Teaching, and Testing Essex, UK: Addison Wesley Longman, pp 167-185

Skehan, P. (2003) 'Task-based instruction' Language Teaching Vol. 36, 1 pp 1-14

Slimani-Rolls, A. (2005) 'Rethinking task-based language learning: What we can learn from the learners' Language Teaching Research Vol. 9, 2 pp 195-218

Smith, B. (2004) 'Computer-mediated negotiated interaction and lexical acquisition' Studies in Second Language Acquisition Vol. 26, 3 pp 365-398

Smith, B. (2005) 'The relationship between negotiated interaction, learner uptake, and lexical acquisition in task-based computer-mediated communication' TESOL Quarterly Vol. 39, 1 pp 33-58

Stern, H.H. (1992) Issues and Options in Language Teaching Oxford, UK: Oxford University Press

Stones, R. (1996) Sociological Reasoning: Toward a past-modern sociology Basingstoke: MacMillan

Stubbe, M., Lane, C., Hilder, J., Vine, E., Vine, B., Marra, M., Holmes, J., & Weatherall, A. (2003) 'Multiple discourse analyses of a workplace interaction' Discourse & Society Vol. 5, 3 pp 351-388

Svennevig, J. (1999) Getting Acquainted in Conversation: A Study of Initial Interactions Amsterdam: John Benjamins Publishing Company.

Swan, M. (2005) 'Legislation by hypothesis: The case of task-based interaction' Applied Linguistics Vol. 26, 3 pp 376-401

Swain, M. (1993) 'The output hypothesis: Just speaking and writing aren't enough' The Canadian Modern Language Review Vol. 50, 1 pp 158-164

Swain, M., Brooks, L., Tocalli-Beller, A. (2002) 'Peer-peer dialogue as a means of second language learning' Annual Review of Applied Linguistics Vol. 22, pp 171-185

Swain, M., & Lapkin, S. (2001) 'Focus on form through collaborative dialogue: Exploring task effects' in M. Bygate, Skehan, P., & Swain, M., Researching Pedagogic Tasks: Second Language Learning, Teaching, and Testing Essex, UK: Addison Wesley Longman, pp 99-118

Szymanski, M. H. (2003) 'Producing text through talk: Question-answering activity in classroom peer groups' Linguistics and Education Vol. 13, 4 pp 533-563

ten Have, P. (1990) 'Methodological issues in conversation analysis' Bulletin de Methodologie Sociologique Nr. 27 (June) [electronic version] pp 1-19

ten Have, P. (1999) Doing Conversation Analysis: A Practical Guide London: Sage Publications

ten Have, P. (2002) 'The notion of member is the heart of the matter: On the role of membership knowledge in ethnomethodological inquiry' Forum: Qualitative Social Research Vol. 3, 3 [online journal]

ten Have, P. (2004) Understanding Qualitative Research and Ethnomethodology London: Sage Publications

Thorne, S.L. (2005) 'Epistemology, politics, and ethics in sociocultural theory' The Modern Language Journal Vol. 89, 3 pp 393-409

Ur, P. (1981) Discussions that Work: Task-Centered Fluency Practice Cambridge, UK, Cambridge University Press

van Lier, L. (1988) The classroom and the language learner Upper Saddle River, NJ: Longman

Varonis, E. M., & Gass, S. (1985) 'Non-native/non-native conversations: A model for negotiation of meaning' Applied Linguistics Vol. 6, 1 pp 71-90

Wagner, J. (2004) 'Commentaries: The classroom and beyond' The Modern Language Journal Vol. 88, 4 pp 612-616

Wagner, J., & Firth, A. (1997) 'Communication strategies at work' in G. Kasper, & Kellerman, E., Communication Strategies: Psycholinguistic and Sociolinguistic Perspectives Essex, England: Addison Wesley Longman Limited, pp 323-344

Wesche, M.B. (1994) 'Input and interaction in second language acquisition' in C. Gallaway, & Richards, B.J., Input and Interaction in Language Acquisition Cambridge, UK: Cambridge University Press, pp 219-249

White, L. (1996) 'Universal grammar and second language acquisition: Current trends and new directions' in W. C. Ritchie, & Bhatia, T.K., Handbook of Second Language Acquisition New York: Academic Press, pp 85-120

White, R. (1999) 'Negotiating meanings & doing tasks' paper presented at the American Association of Applied Linguistics Stamford, Connecticut.

Widdowson, H.G. (1998) 'Skills, abilities, and contexts of reality' in W. Grabe *et al.*, Annual Review of Applied Linguistics 18 Cambridge, UK: Cambridge University Press, pp 323-333

Williams, J., Inscoe, R., & Tasker, T. (1997) 'Communication strategies in an interactional context: The mutual achievement of comprehension' in G. Kasper, & Kellerman, E., Communication Strategies: Psycholinguisic and Sociolinguistic Perspectives Essex, England: Addison Wesley Longman Limited, pp 304-322

Willis, J. (1996) A Framework for Task-based Learning. Essex, UK, Longman

Young, R. F., & Lee, J. (2004) 'Identifying units in interaction: Reactive tokens in Korean and English conversations' Journal of Sociolinguistics Vol. 8, 3 pp 380-407.

Young, R. F., & Miller, E.R. (2004) 'Learning as changing participation: Discourse roles in ESL writing conferences' The Modern Language Journal Vol. 88, 4 pp 519-535

Yule, G., Powers, M., & Macdonald, D. (1992) 'The variable effects of some task-based learning procedures on L2 communicative effectiveness' Language Learning Vol. 42, 2 pp 249-277

Yule, G., & Tarone, E. (1997) 'Investigating communication strategies in L2 reference: Pros and cons' in G. Kasper, & Kellerman, E., Communication Strategies:

APPENDIX

Appendix A

Transcription Convention (Atkinson and Heritage 1984)

[[ ]] Simultaneous utterances – (beginning [[ ) and (end]])

[ ] Overlapping utterances – (beginning [ ) and (end])

= Contiguous utterances

(0.4) Represent the tenths of a second between utterances

(.) Represents a micro-pause (1 tenth of a second or less)

: Sound extension of a word (more colons demonstrate longer stretches)

. Fall in tone (not necessarily the end of a sentence)

, Continuing intonation (not necessarily between clauses)

- An abrupt stop in articulation

? Rising inflection (not necessarily a question)

__ Underline words indicate emphasis

↑↓ Rising or falling intonation (after an utterance)

° ° Surrounds talk that is quieter

hhh Audible aspirations

·hhh Inhalations

.hh. Laughter within a word

> > Surrounds talk that is faster

< < Surrounds talk that is slower

(( )) Analyst's notes

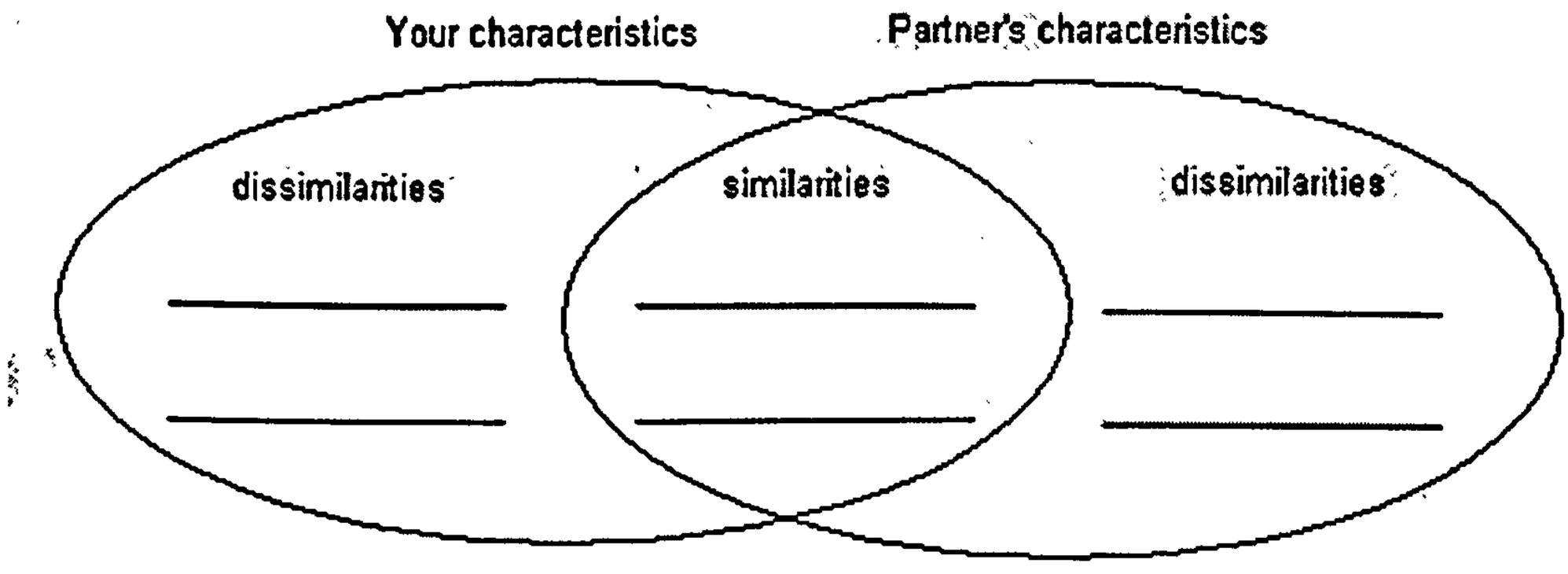
Appendix B

Instructions for the communicative tasks (**Task-taker 1**)

Please follow the directions for each step. Try to complete each step before moving on to the next. Complete each task without looking at each other's document. Before you begin, introduce yourself. Thank you and enjoy the tasks!

1. Task 1: Get to know your partner

   Discuss 2 similarities and 2 dissimilarities between you and your partner. Use the following organizer to aid your discussion.



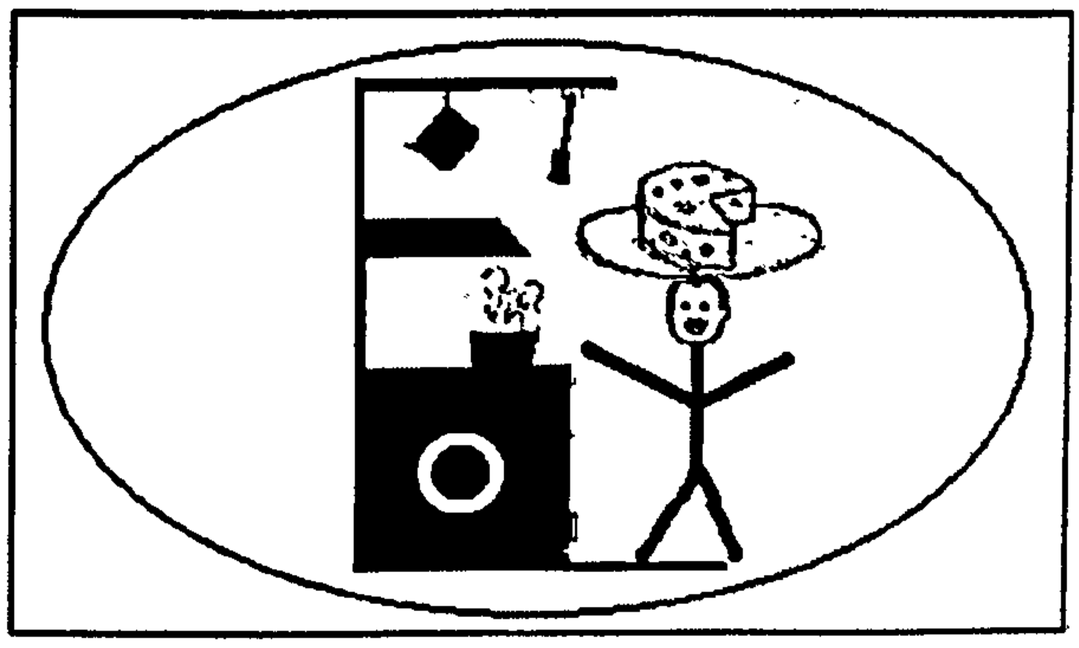
2. Task 2: Controversial Statement

   Read the following statements and discuss with your partner the meaning of each sentence. What are your feelings to such beliefs?

   - English is the world's official language.
   - Sick people should be able to end their life.
   - A woman belongs at home.
   - War is necessary for future peace.

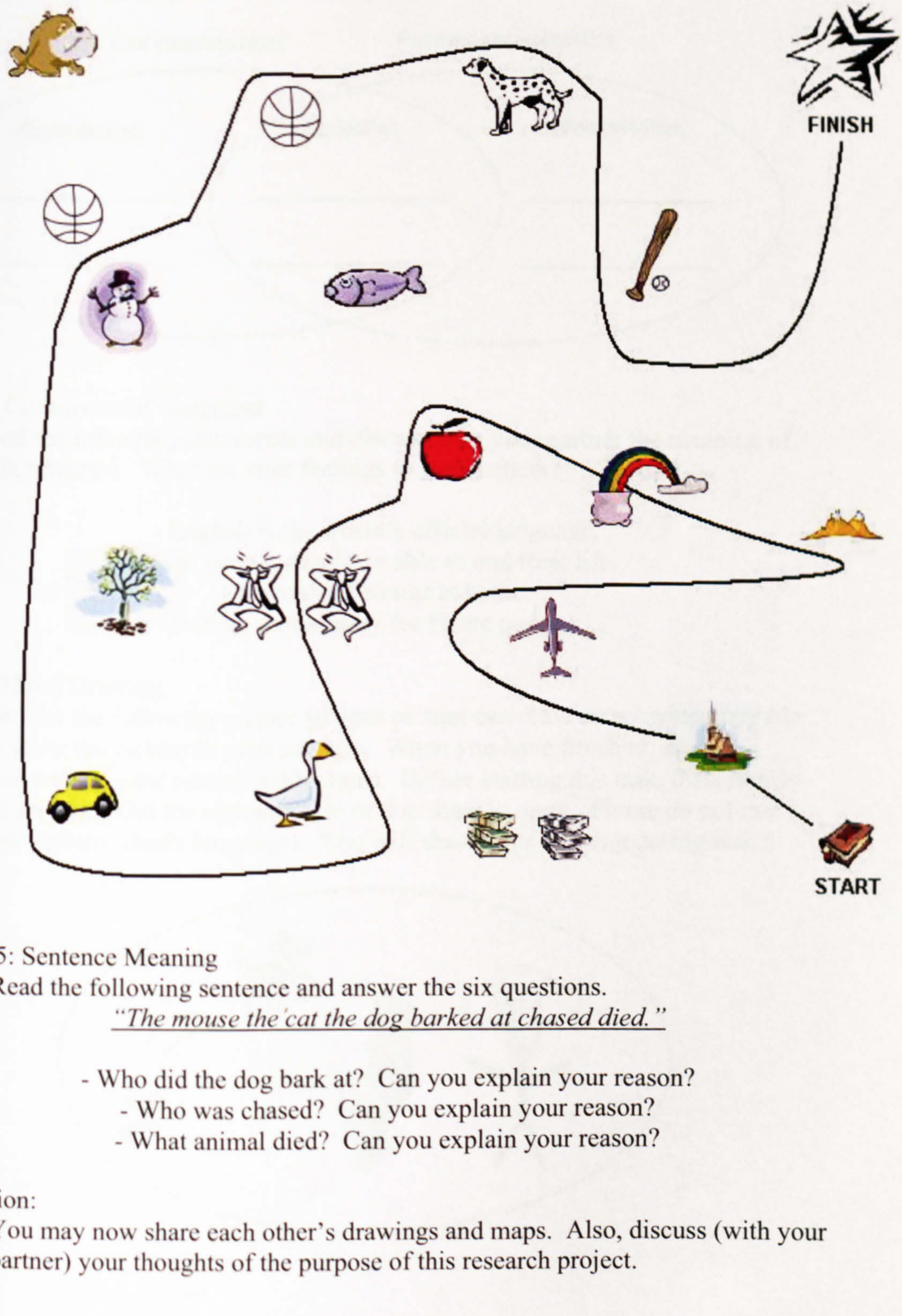
3. Task 3: Blind Drawing

   Describe the following picture so your partner can draw an accurate copy (do not show the picture to your partner). When you have finished, draw a picture using your partner's directions. Before starting this task, discuss who will go first. Use the opposite side of this sheet to draw. Please do not use hand gestures (body language). You will share your drawing during task 5.



4. Task 4: Map Game

Please look at the following map. Your partner's map does not have the route. You must guide your partner from start to finish (following the line as accurately as possible). Some pictures on both maps are not the same, but please do not look at your partner's map. Please do not use hand gestures (body language). Wait until task 5 to share your map.



5. Task 5: Sentence Meaning

Read the following sentence and answer the six questions.

"The mouse the cat the dog barked at chased died."

- Who did the dog bark at? Can you explain your reason?
- Who was chased? Can you explain your reason?
- What animal died? Can you explain your reason?

Conclusion:

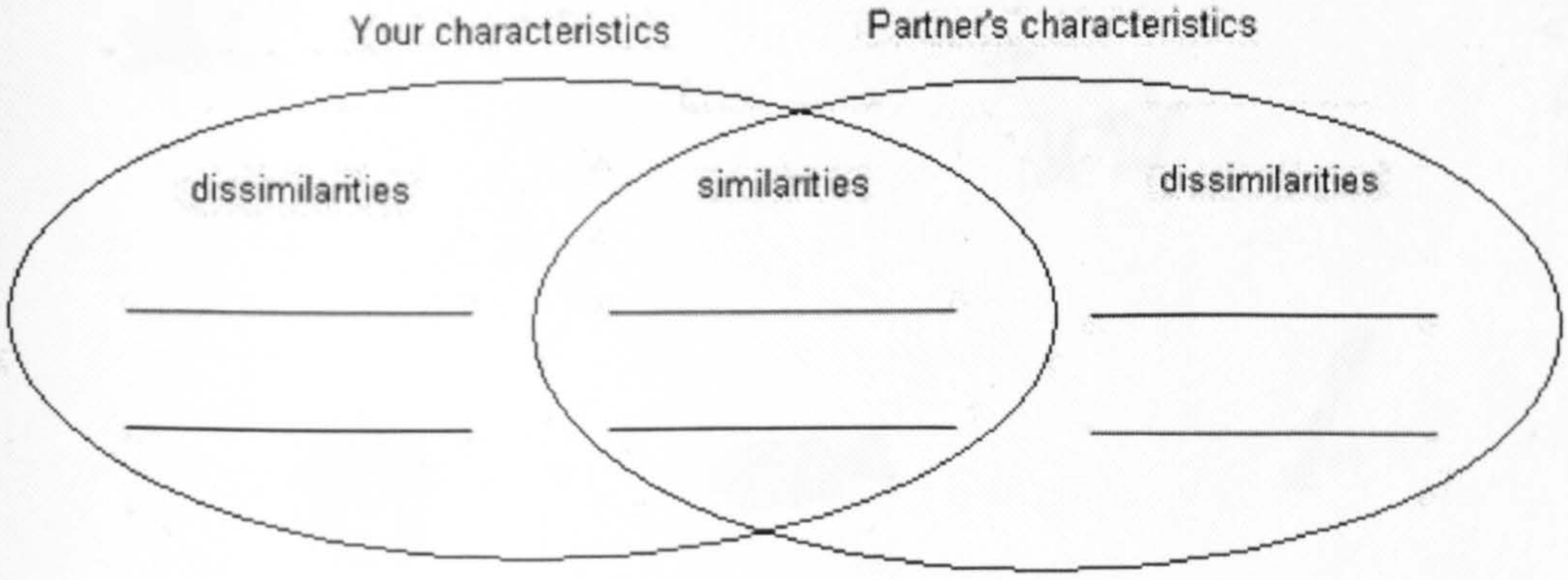
You may now share each other's drawings and maps. Also, discuss (with your partner) your thoughts of the purpose of this research project.

Instructions for the communicative tasks (**Task-Taker 2**)

Please follow the directions for each step. Try to complete each step before moving on to the next. Complete each task without looking at each other's document. Before you begin, introduce yourself. Thank you and enjoy the tasks!

1. Task 1: Get to know your partner

   Discuss 2 similarities and 2 dissimilarities between you and your partner. Use the following organizer to aid your discussion.



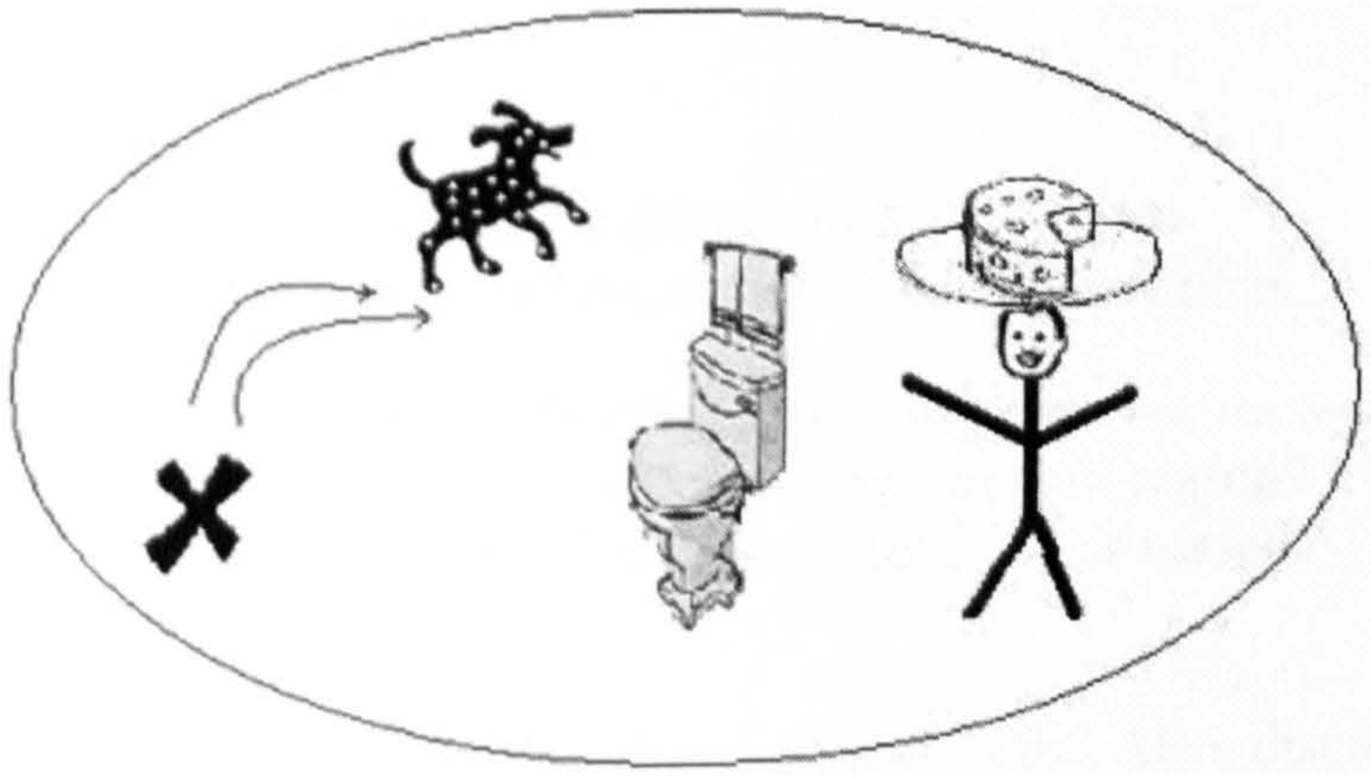
2. Task 2: Controversial Statement

   Read the following statements and discuss with your partner the meaning of each sentence. What are your feelings to such beliefs?

- English is the world's official language.
- Sick people should be able to end their life.
- A woman belongs at home.
- War is necessary for future peace.

3. Task 3: Blind Drawing

   Describe the following picture so your partner can draw an accurate copy (do not show the picture to your partner). When you have finished, draw a picture using your partner's directions. Before starting this task, discuss who will go first. Use the opposite side of this sheet to draw. Please do not use hand gestures (body language). You will share your drawing during task 5.



4. Task 4: Map Game

Please look at the following map. Your partner's map has the route. You must follow your partner's directions from start to finish (drawing the route as accurately as possible). Some pictures on both maps are not the same, but please do not look at your partner's map. Please do not use hand gestures (body language). Wait until task 5 to share your map.

5. Task 5: Sentence Meaning

Read the following sentence and answer the six questions.

"The mouse the cat the dog barked at chased died."

- Who did the dog bark at? Can you explain your reason?
- Who was chased? Can you explain your reason?
- What animal died? Can you explain your reason?

Conclusion:

You may now share each other's drawings and maps. Also, discuss (with your partner) your thoughts of the purpose of this research project.